

*Animal Science for
App*

THE *Country* GUIDE

APPLIED SCIENCE READING ROOM

UNIVERSITY OF ALBERTA

MAY 23 1956

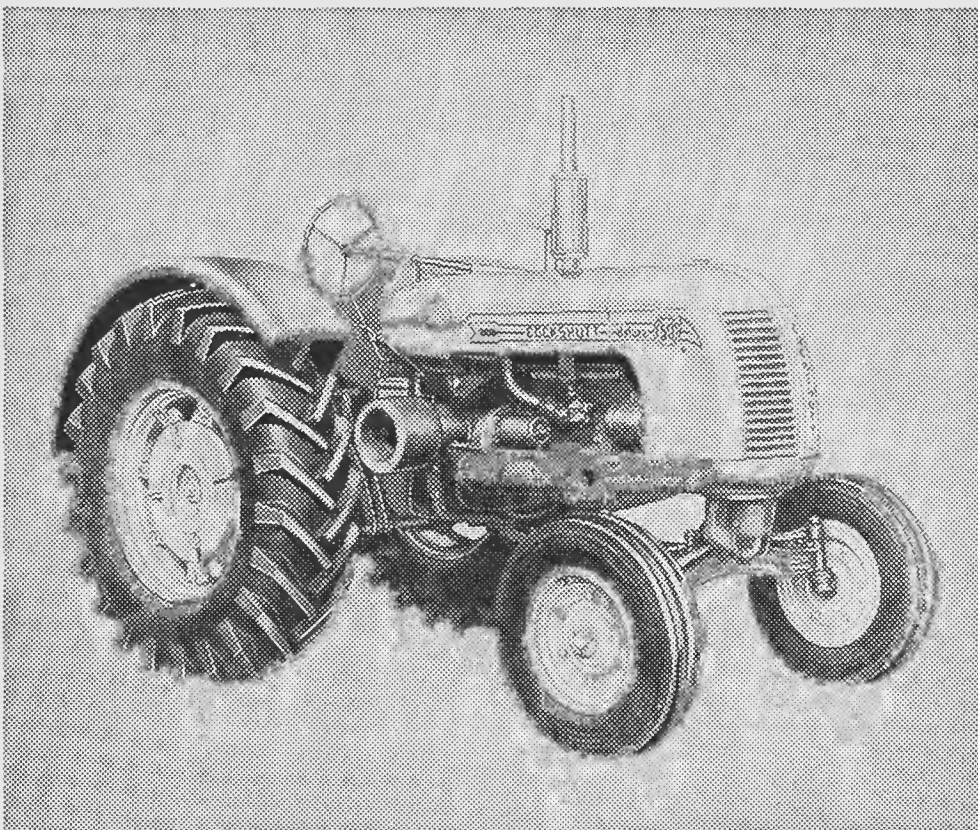
LIBRARY

X R
THE LIBRARY OF ALBERTA
UNIVERSITY ALTA 357
EDMONTON ALTA T5C 2G8
NOV 56 T5322008

MAY, 1956

usable *more* power

great new Deluxe Cockshutt tractor fleet



New Cockshutt "50" Deluxe. A mammoth in power. Diesel or gas. Handles any 4-5 plow job with ease.

HERE are tractors with far more than mere horsepower claims. Cockshutt power is *usable* power . . . power immediately available to your touch in handling bigger loads at faster speeds.

Yes, the big emphasis is on power in the great new Cockshutt Deluxe tractor fleet. It's a power you can feel the minute you settle down behind the wheel. Test a new Cockshutt for yourself. See how effortlessly it goes about its work.

You'll find less slippage, less down-shifting, less fuel consumption, less strain as you pit your Cockshutt against the most grueling jobs.

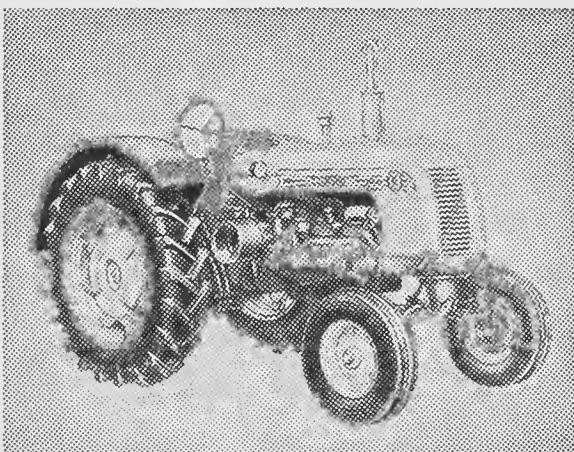
By all means see and try those sleek, smart two-toned Cockshutt tractors displayed at your Cockshutt dealer. You'll agree that here are tractors designed with you in mind, no matter what may be your farm size or your tractor requirements.



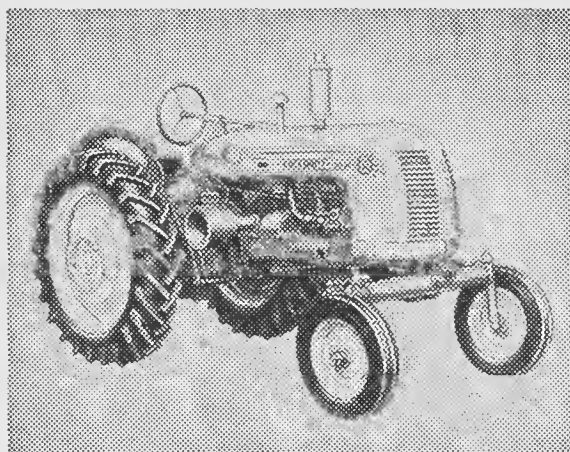
*The only tractor line made in Canada
by Canadians for Canadian farming.*

Cockshutt

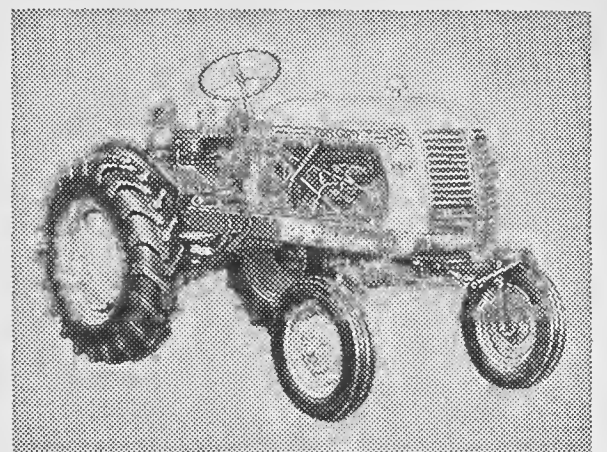
Farm Equipment Ltd. Brantford, Ontario



New Cockshutt "40" Deluxe. A new peak in power in 3-4 plow tractors. Diesel or gas.



New Cockshutt "35" Deluxe. A completely new tractor combining brown and economy. 2-3 plow power — plus.



New Cockshutt "20" Deluxe. Tops in power and tops in economy for any 2 plow job.



[Bob Taylor photo]

THE *Country* GUIDE

From Cover to Cover
MAY, 1956

Weather Forecast—
by Dr. Irving P. Krick and Associates 4
Under the Peace Tower—by Hugh Boyd 15
Editorials 74

ARTICLES

Stillbestrol and You—by H. S. Fry	9
From Hens to Henry—by Jack Sutherland	10
Rothamsted and Broadbalk Field— by J. A. Toogood	11
2,4-D or MCP?—by Richard Cobb	13
A Hundred Acres of Spuds	31
Forage Seed Supplied at Cost	31
Adjustments for Oneway—by Cam Kirk	32
"Gorgeous"—by Hilda Crook	34
Steel Loading Barn	34
Shoo, Fly!—by Dorothy E. Verdoorn	37
Stanchion Barn Permits Individual Care	38
Future of Apples—by R. M. Scott	40
Manitoba Turkey Growers Organize	42
Family Farms for the Future	43
Our Two Most Interesting Pets— by J. A. Capling	64
Assembly Line Sheep Enterprise	66
Cows Make Their Own Music— by Don J. MacLeod	66
Selling the Market Board Idea	72
Honey Bees' Secret—by R. Middleton	75

FICTION

Guarded Gold—by S. Omar Barker	12
--------------------------------	----

FARM

Farm Notes	6
Get It At A Glance	16
Livestock	18
Field	20
Horticulture	22
Poultry	24
Workshop	25
What's New	27
Young People	28

HOME

The Countrywoman—by Amy J. Roe	49
A Country Parson—by John G. Ferry	50
The Bride and Her Wedding— by Phyllis A. Thomson	51
Starting with Bread	52
Date Desserts	53
Bedtime Story Man	56
Miniature Gardens—by Jewell Casey	57
Study of the Jobless	58
Needlework	59
Sew for Summer (Patterns)	61
Country Boy and Girl	62
Sketch Pad—by Clarence Tillenius	62

COVER: May is the month of seed time and blossoms. Owing to an unusually late cold spring these blossoms may seem unduly ambitious in some parts of the country.

Editor: H. S. Fry
Associate Editor: RICHARD COBB
Field Editors:
C. V. FAULKNER, Alta. and W. Sask.
DON R. BARON, Eastern Canada
Home Editor: AMY J. ROE
Assistant Home Editor: PHYLLIS THOMSON
Contributing Editor: ANN TILLENIUS
Extension Director: G. B. WALLACE
Advertising Sales Manager: R. J. HORTON

J. E. BROWNLEE, Q.C., President
R. C. BROWN, Managing Director
J. S. KYLE, Business Manager

SUBSCRIPTION PRICES IN CANADA—50 cents one year; \$1.00 two years; \$2.00 five years; \$3.00 eight years. Outside Canada \$1.00 per year. Single copies 5 cents. Authorized by the Postmaster-General, Ottawa, Canada, for transmission as second-class mail matter.

Published and printed by THE PUBLIC PRESS LIMITED, 290 Vaughan St., Winnipeg 2, Man.

CONTENTS COPYRIGHTED
Non-fiction articles or features may be reproduced where proper credit is given to The Country Guide.

WORKS MAGIC on weary old walls!



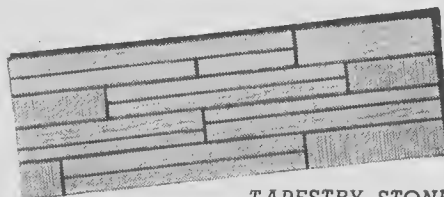
**Sidney Insulating Siding goes up
fast—completely covers old walls!**

**2 beautiful
sidings—**



SHADOW LINE

For a beautiful shake-like effect in soft, modern colors.



TAPESTRY STONE

A graceful, stone-type siding seen to especially good advantage when used with "Shadow Line."

You'll be amazed at how good your old home looks—transformed by Sidney Insulating Siding! Years seem to fall from your home as you put up the big colorful panels. The new fire-resistant, rot-proof walls bring you added comfort—a warmer home in the winter, cooler in the summer.

And once they're up, Sidney Insulating Sidings save you money every year. Their surface of deeply-imbedded mineral granules defies the weather . . . never needs painting or repairs.

You can do the job yourself—the big 15" by 4' panels go up in a couple of days. Complete instructions in the siding bundles.

Built on heavy insulating board, sealed with fine-quality asphalt, and surfaced with permanent mineral granules, Sidney Insulating Sidings are the best value—by far! Ask your building supply dealer to show you samples—and get a free quotation—now!



Insulating Sidings

SEND FOR FREE VALUABLE HANDBOOKS!
USE THIS HANDY COUPON.

SIDNEY ROOFING & PAPER CO. LTD.,
Sales Promotion Division,
Granville Island, Vancouver, B.C.

Without obligation, please send me the publication(s) marked below:

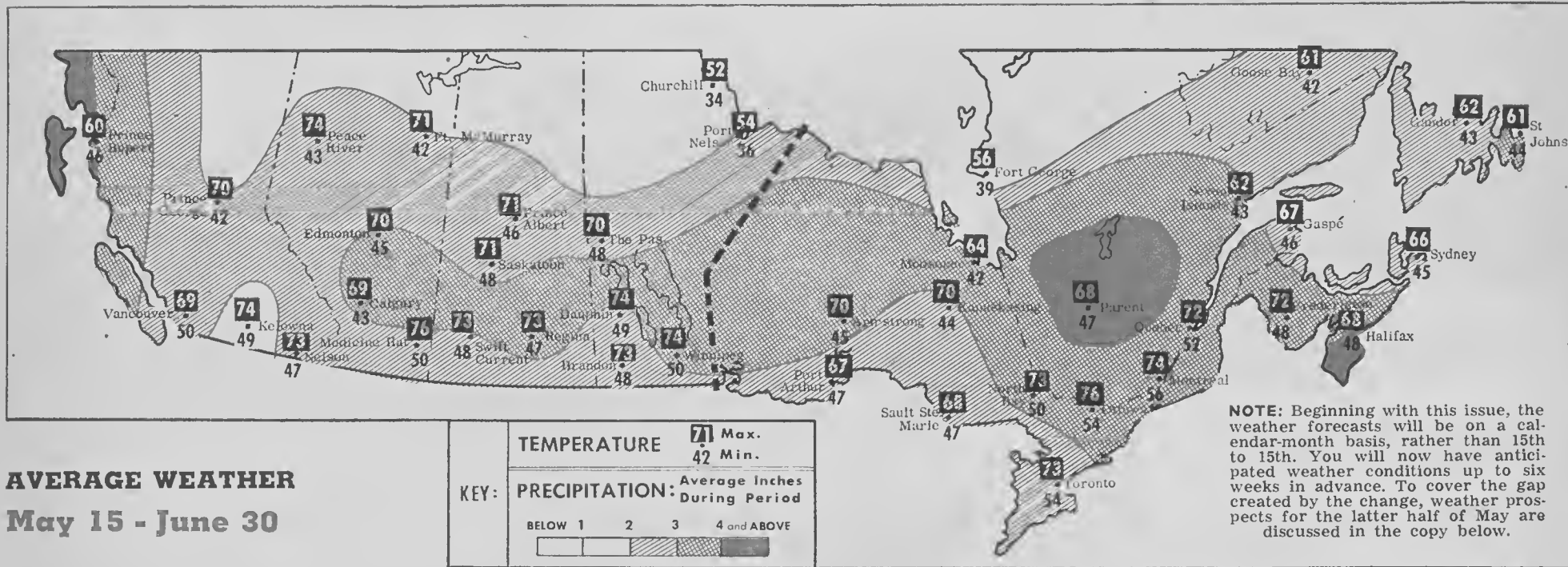
☐ Sidney Insulating
Siding Folders

☐ Farm & Home
Roofing Handbook

NAME _____

ADDRESS _____

(Allow a day or two either way in using this forecast.
It should be 75 per cent right for your area, but
not necessarily for your farm.—ed.)



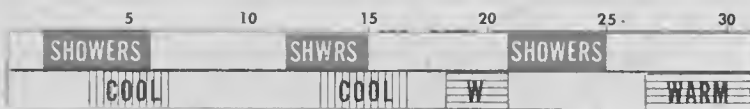
Alberta

Warm weather will predominate in the latter half of May, with no period of appreciable cooling. However, a trend to cooler weather is expected in early June, persisting up to mid-month. Minima in the low and middle thirties will be experienced on several mornings. Considerable warming will occur after the 15th and continue through the balance of the month. Maxima, for the most part, will be in the eighties.

Temperature departures from normal will be small over the six-week period.

Showers are likely between the 20th and 25th of May, with more important amounts in June. Principal storminess is expected on or about the 3rd, 13th, and 23rd. Total precipitation for the period should approximate normal. Planting should progress nicely, with no serious impediments. Excellent crop growth and development is anticipated. ✓

PRECIPITATION
JUNE
TEMPERATURE



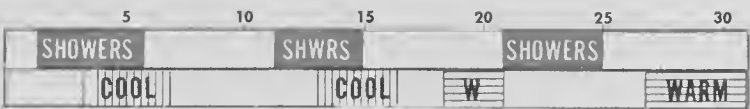
Saskatchewan

Temperatures will not depart appreciably from normal over the six-week period. In general, the latter half of May will be mild with maxima mostly in the upper seventies. Cooler weather is in prospect for about the first two weeks of June. Several days of minima in the middle and upper thirties are likely. Widespread, damaging freezes, however, are not anticipated. Warmer weather will return to

round out the period, with daytime temperatures commonly in the eighties.

A relatively dry May will give way to more seasonal rainfall in June as storm tracks move northward. A few showers are expected between the 20th and 25th of May but more important amounts are in prospect for the unsettled spells during the fore-part of June and again about the 23rd. All told, a very favorable period for agriculture is anticipated. June rains will enhance yields. ✓

PRECIPITATION
JUNE
TEMPERATURE



Manitoba

Temperatures will make only small departures from normal from mid-May through June. For the period as a whole, departures are expected to be somewhat on the positive side, that is, a degree or two above normal. Rather warm weather with maxima in the eighties is expected on several days about the 20th of May. The warm spell will be modified by cooler weather and showers thereafter, indeed, much cooler weather during the

fore-part of June. Likewise, shower activity will pick up materially and heavy amounts are expected in the first two or three weeks of the month. Warmer weather will follow and the month will terminate quite hot. Maxima in the upper eighties and nineties will be characteristic.

Agricultural prospects are most encouraging. There should be ample opportunity to complete planting, and June rains will induce excellent growth and development. ✓

PRECIPITATION
JUNE
TEMPERATURE



Ontario

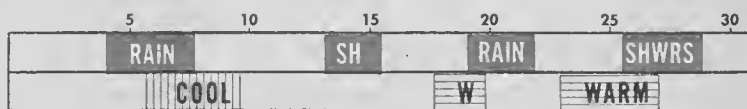
A warm spell about the 20th of May will give way to two or three weeks of cooler weather. A return to typical summer heat will occur the latter half of June. However, the entire period will be free of extremes and temperatures will average only a degree or two above normal. No unusual frost or freeze injury is anticipated.

Rainfall will be relatively heavy. Late May and early June are expected

to be especially wet in eastern portions of the province. In the west, the more important amounts are likely in June. Principal storminess throughout the region is expected to be centered about the 16th and 24th of May and 6th and 21st of June. Less important showers are forecast about the 15th and 27th of June.

Weather conditions will be generally agreeable to agriculture. With adequate soil moisture, crops will make favorable growth and development. ✓

PRECIPITATION
JUNE
TEMPERATURE



Quebec

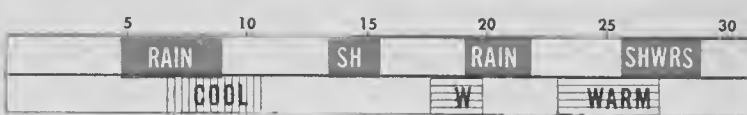
Temperatures will vary within small limits and, for the entire period, should average only a degree or two above normal. Warm weather in mid-May will be replaced by cooler air late in the month and persisting through the fore-part of June. Considerable warming is anticipated during the latter half of June, when maxima in the upper eighties and low nineties will often be experienced.

Rainfall, appreciable in late May, will become more seasonal in June.

Indeed, subnormal amounts are anticipated in central and northern districts. Principal stormy periods are expected about the 15th to 18th and 23rd to 26th of May; 4th to 8th and 19th to 23rd of June. Less important shower activity is likely about the 15th of June and again after the 25th.

Planting should be accomplished without serious difficulty and crop growth and development should be encouraging throughout most parts of the province during the forecast period. ✓

PRECIPITATION
JUNE
TEMPERATURE



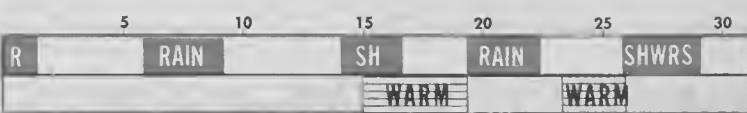
Maritime Provinces

The wet and oft-times cool weather of May will give way to relatively dry conditions and more seasonal temperatures in June. The period will be introduced, however, by a warm spell that will persist to about the 25th of May. Cooler weather will follow, carrying over through the first ten days or two weeks of June and posing some threat to fruit. The latter half of June

will be quite warm, cancelling the negative temperature departures accumulated early in the month.

Heavy rains, causing some delay in planting, are anticipated during the last two weeks of May. Brief respite is expected about the 19th to 24th. Lesser amounts are in prospect for June. Principal periods of rainfall are likely from the 6th to 9th and 19th to 22nd, with less important amounts about the 15th and 27th. ✓

PRECIPITATION
JUNE
TEMPERATURE



FORD ENGINEERING

*Saves
your back
and
money!*



**FORDSON MAJOR
DIESEL** *costs less to buy...
costs less to own*

The big, rugged 3-4 plow Fordson Major Diesel costs hundreds of dollars less to buy than other diesels with comparable power. It uses up to 50% less fuel than a gas tractor of similar power and in most areas diesel fuel costs up to 20% less than gas.

FORD FARM EQUIPMENT *boosts earnings . . . is built to take it longer*

The Fordson Major Diesel Tractor is Ford-engineered to pack the extra power needed to beat the toughest jobs. There's lots of low-cost power to handle big equipment and get more jobs done faster. Ford engineering reduces back-breaking farm toil by designing tractors and equipment that work together as a single, efficient farm machine. With a Fordson Major

Diesel plus matching Ford Farm Equipment life can be more enjoyable—with ease, you can do everything from plowing thru' harvesting with full diesel economy.

Perhaps you are managing to get by with an old tractor. Chances are its capabilities are limited. It won't do all the jobs you want to do around your farm. See your Ford Tractor Dealer. Find out how Ford Equipment and a Fordson Major Diesel—will give you labour-saving, dollar-saving Ford Farming.

- 13 TRACTOR MODELS
- 3 POWER RANGES
- OVER 100 IMPLEMENTS



EXTRA LUGGING POWER *lets this power house pull right through the tough spots—with power to spare. It does more, saves more.*



IMPLEMENT CONTROL IS A CINCH *with built-in hydraulic system. Implements can be lifted, lowered or held in any position.*



LOW MAINTENANCE COSTS. *Rugged construction plus clean design mean more years of trouble free service—fewer repair bills.*

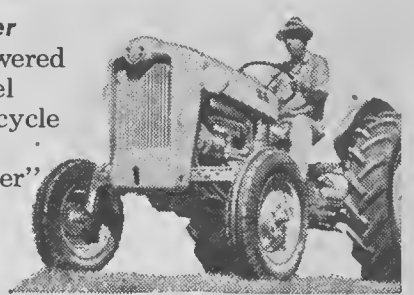


*Genuine Parts
and Expert Service
available everywhere
in Canada*

See your
FORD TRACTOR DEALER
he'll talk trade

FORD TRACTORS

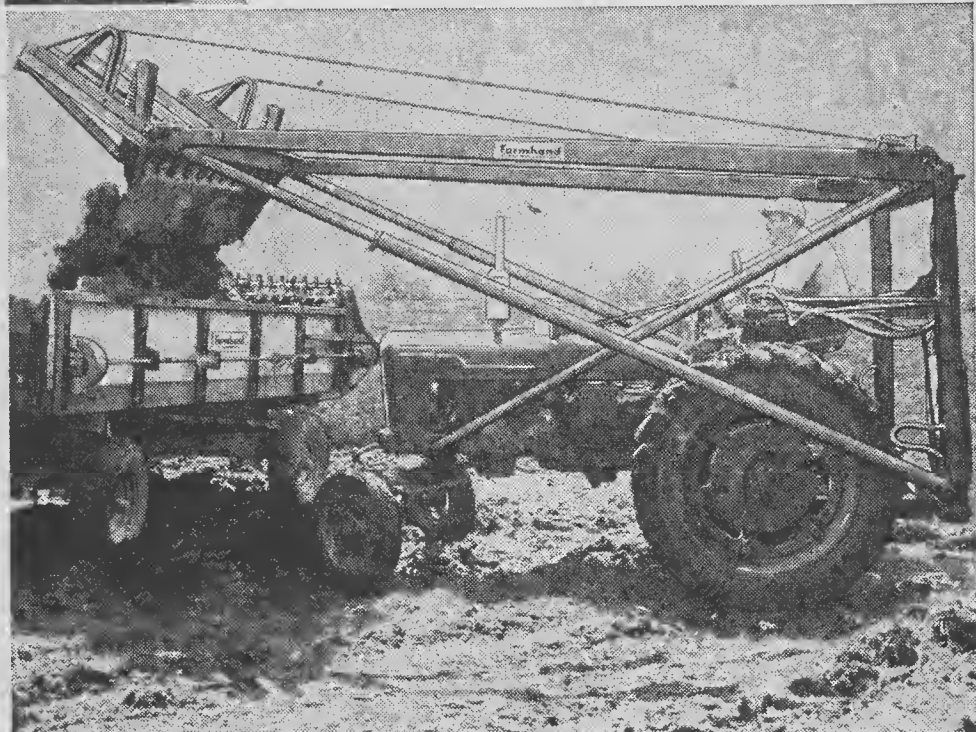
greatest range ever
Ford gasoline-powered tractors in 4-wheel or the all-new tricycle models offer the famous "Red Tiger" engine and Ford's acclaimed built-in hydraulic system.



Ford Farming... gets more done... at lower cost

FORD TRACTOR AND EQUIPMENT SALES COMPANY OF CANADA LIMITED
SAINT JOHN • MONTREAL • TORONTO • WINNIPEG • REGINA • CALGARY • VANCOUVER

"You get so much more for your money with FARMHAND!"



HERE'S THE LEADER IN THE FIELD—It's the famous Farmhand Heavy-Duty, the loader with no equal on the market today from the standpoint of quality and versatility. Right now the Heavy-Duty could be doing your manure loading. Three or four forkloads and your spreader is full. The rugged steel Manure Fork attachment is 8 ft. wide; clears right up to fences and buildings. The Heavy-Duty's 3500-lb. lift makes short work of even those hard-packed piles. And when there's haying to be done, both sweeping and stacking, the Farmhand Heavy-Duty does the job faster and at far less cost. That's why it's the best-selling loader-stacker on the market.



NOW, SWEEP ROCKS with your Farmhand. This new attachment for the Heavy-Duty Loader sweeps an 8-ft. strip; raises, carries and dumps your load with just a simple movement of the hydraulic control. Use it to reclaim rocky land for production; to prevent damage to implements. It's built to last, and priced right.



CUT HAY AND GRAIN COSTS as much as 50% with the famous Owatonna self-propelled Windrower. Available in 2 models and 5 sizes, the Owatonna is now being sold by your Farmhand dealer. It saves time and fuel . . . one quick trip with the Owatonna and you're ready to stack, bale, chop or combine. Thousands now in use.



BIGGER PAYLOADS, FASTER SPREADING—That's reason enough to own a Farmhand 6-ton "Power-Box" Spreader. It helps you beat high labor costs and still handle larger acreages. This big PTO-Spreader spreads a wide, even swath, handles 230-bu. loads with ease. There's a 150-bu. model too. Both convert to Feeders and Forage Units.



Farmhand
FIRST IN FARM MATERIALS-HANDLING

GET THE COMPLETE FACTS!

Write: **THE FARMHAND CO.,**
Dept. CGW-56
1236 Sargent Ave., Winnipeg

Send information on _____

Name _____

Address _____

Town _____ Prov. _____

A Division of Superior Separator Co.,
of Canada, Ltd.

FARM NOTES



[Guide photo

Officials at the Western Canada Teen Conference, Nanton, Alta.: Lind Thomas, secretary; Verna Caspell, treasurer; Bill Young, chairman; Mrs. M. L. Johnson.

Excessive Inbreeding Danger

LANDRACE hogs, still in process of getting acclimatized to this country, would be seriously handicapped if they were to lose vigor through inbreeding. This was one of the major problems facing the Canadian Landrace Swine Association at their first annual meeting in Guelph recently.

As a means of overcoming this danger, it was decided to ask the Health of Animals Department in Ottawa to consider some relaxation of the regulations, which prohibit direct imports of hogs from the Scandinavian countries. Members felt that this would help Landrace hogs to overcome some of the troubles experienced in other breeds.

New Markets For Potato Growers

A SURVEY of potato marketing undertaken by the Ontario Department of Agriculture, has shown that 7,805 carloads were brought into the province in 1955, and 313 carloads were shipped out. The demand for potatoes has increased tremendously in recent years from processors for soups, potato chips, french fries, frozen dinners, baby foods, instant potatoes, pre-peeling, dehydration and canning. Other factors are the increase in population, and the use of potato flours in bread making, and for manufacturing starch and glucose.

Sebago variety was the first choice with Ontario wholesalers, with Katahdin and Green Mountain in the next two places. It was also found that processors often used large tubers, but the consumer trade preferred potatoes graded to 2¼ and 3½-inch sizes. For these, the most popular packages were 10 and 50-pound paper bags.

Crown Lands Price Reduction

ONE effect of the decrease in Saskatchewan farm income during the past two years has been a reduction in the selling price of Crown lands leased to veterans, who have the option to buy after a satisfactory ten-

year lease. The Saskatchewan Government has announced a total reduction of \$500,000 in the price 600 veterans would pay this year if they wanted to buy Crown land, and about \$2 million for the 1,800 who will have the opportunity in future. The saving on individual parcels of land varies from several hundred dollars per quarter on good soils to little or nothing on the poorer land.

Farming In the City

A CITY of farms has sprung up in Orange County, California. With the name of Dairyland, it has a population of 600 and covers about 2½ square miles. The mayor of Dairyland, Jack de Vries, and all the members of the council belong to the Farm Bureau, and the only paid employee is a girl to do clerical work.

It started last year, when the neighboring city, Buena Park, tried to grab a strip of what is now Dairyland, but was stopped by a court ruling. Realizing the growing danger to their farms, 60 dairymen attended a meeting and set up a "war fund" and a committee to uphold their rights. The result was the decision to become incorporated as a city.

Jubilee On the Campus

THE first Canadian institution to offer a formal education in agriculture, west of Ontario, will soon be 50 years old. On June 21 and 22, the golden jubilee of the Manitoba Agricultural College, now the Faculty of Agriculture, University of Manitoba, will be celebrated by alumni, diploma students and members of the faculty. The events will include a get-together in "year groups" for the men, special programs for women, conducted tours, featured speakers and entertainments. There will also be a sod-breaking ceremony for the new agriculture building.

Past and present students hope to raise \$25,000 to furnish and equip the auditorium and memorial corridor of the new building, and industrial firms are being canvassed for another \$75,000 for research equipment.

More models to choose from...

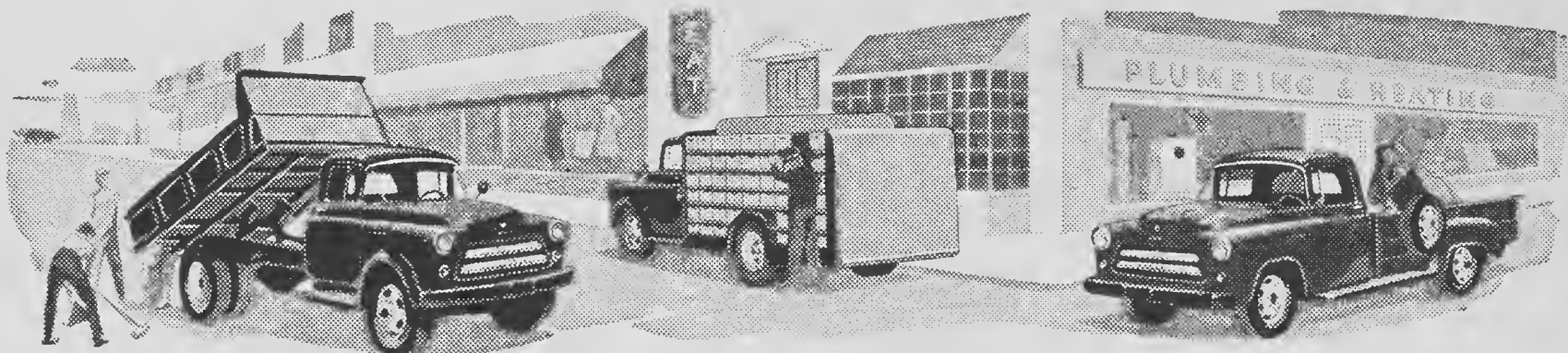


"F" model Chassis-and-Cab with Van Body—15,000 lbs. G.V.W.

"B" model Panel—5,000 lbs. G.V.W.

"B" model Express—6½-foot body, 108" wheelbase—5,000 lbs. G.V.W.

increased capacities for bigger payloads...



"H" model Chassis-and-Cab with Dump Body—17,000 lbs. G.V.W.

"F" model Chassis-and-Cab with Bottler's Body—15,000 lbs. G.V.W.

"D" model Express—9-foot body, 126" wheelbase—8,800 lbs. G.V.W.

new 6 and V-8 engines, scores of new features...



"K8" model Tractor with Trailer—45,000 lbs. G.C.W.

"B" model Express—7½-foot body, 116" wheelbase—5,000 lbs. G.V.W.

"D" model Chassis-and-Cab with Stake Body—8,800 lbs. G.V.W.

more than ever, a truck to fit your job!

Whatever you need in a truck, you'll find more to choose from in the great new Dodge line!

For not only does Dodge offer a wider range of models than ever before—every truck is "Job-Rated" to fit the job it has to do.

New Dodge trucks offer you a wider choice of power, too. Two new advanced-design V-8's in medium- and high-tonnage models provide up to 220 horsepower. Famous Dodge truck Six is now stepped up to 125 horsepower.

In addition, there are such outstanding new features as push-button PowerFlite automatic transmission, now available on ½-ton models; new 12-volt electrical system; ignition-key starting.

And, with all this, Dodge trucks are priced with the lowest! See your Dodge-De Soto dealer now. Get a better deal with a new Dodge truck!

DODGE

"Job-Rated"

TRUCKS

FROM ½ TON TO 65,000 LBS. G.C.W.—
A TRUCK TO FIT EVERY HAULING NEED!

THE FIRST

Self-propelled swather designed, developed and built by a major line implement company

McCORMICK

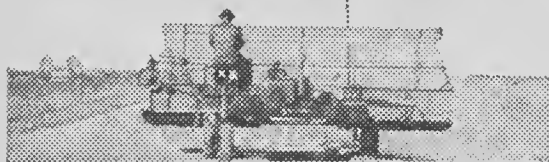
Self-propelled

161

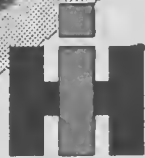
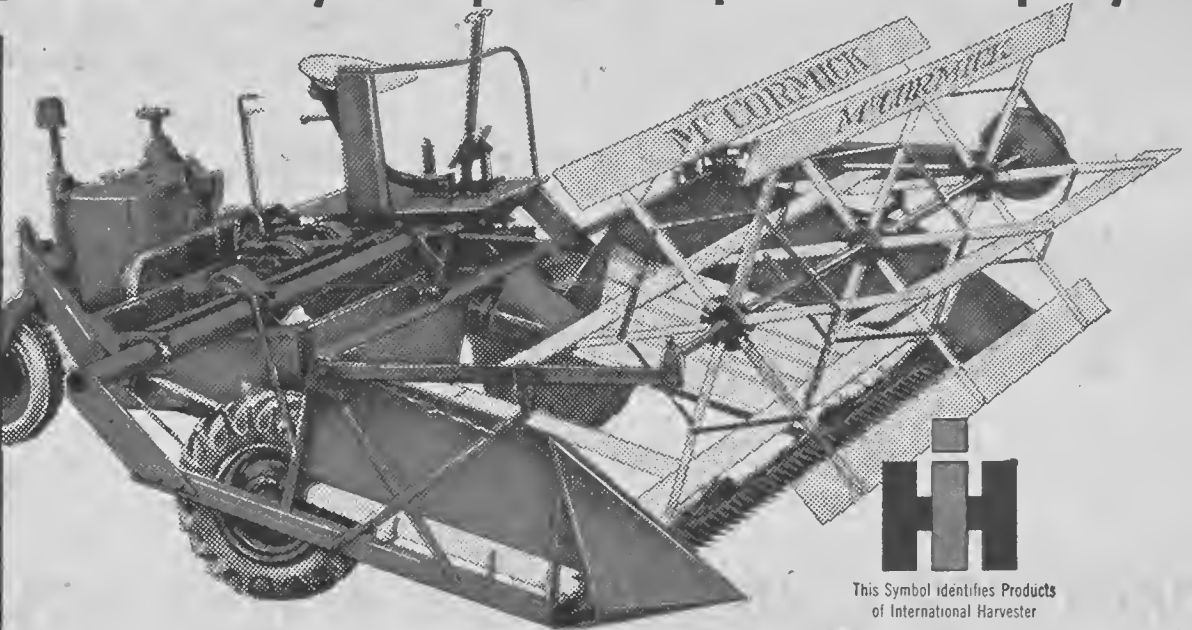
WINDROWER



CUTS CLEAN at any height. The No. 161 has a cutting range of 3 to 32 inches!



EASY TRANSPORT—Narrow tread drive wheels let you travel the shoulder of the road.



This Symbol identifies Products of International Harvester

FEATURES

- Self-propelled
- 12 or 16 foot cut
- Low-angle platform
- Center-delivery
- Six bat, gear-driven reel
- Single hydraulic lever control of both platform and reel
- Variable speed drive—2½ to 9 mph.
- On-the-go speed change
- Narrow wheel tread
- Air-cooled or (optional) water-cooled engine
- Planetary drive steering
- Easy-to-reach controls
- Handy foot brake
- Adjustable seat
- Extra-life construction

Designed, developed, field-proved and manufactured by International Harvester. Here's the *only* self-propelled windrower on the market BUILT by a major line company. The McCormick No. 161 self-propelled cuts its own path ... you open a field anywhere, without damage to standing crop. Team it up with *your* combine and have the ideal crop-saving combination, to save you time and work; and keep your harvesting costs low.

Makes crop-saving criss-crossed swath for clean, easy pick-up. Features 12 or 16 foot cutting widths, full maneuverability, low angle platform, quick responding hydraulic controls, maximum operator comfort, easy handling and easy transport. Your choice of air-cooled or (optional) water-cooled engine. Your IH Dealer is the man to see for the complete No. 161 story.

BUILT BY International Harvester Company of Canada Limited, Hamilton, Ontario

More grain in the tank— More cash in the bank

CHOOSE
from 5 models
and 7 sizes

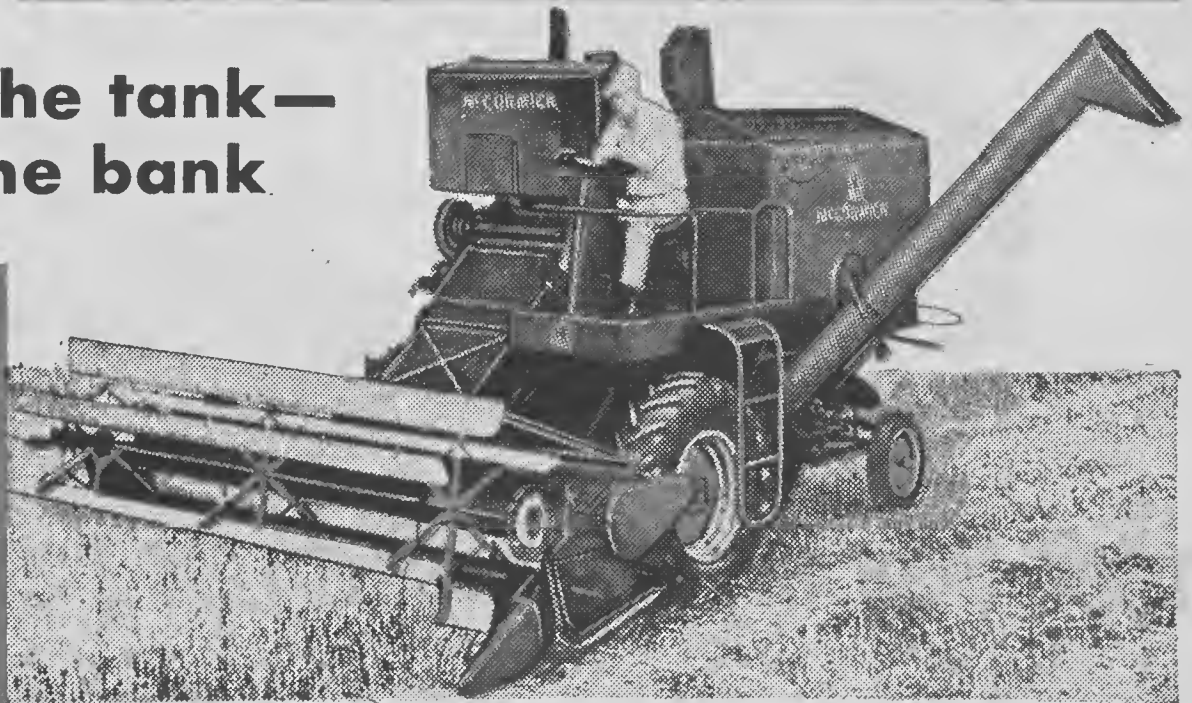
The New
**McCORMICK
COMBINE**

THAT FITS YOUR
NEEDS EXACTLY

This
symbol



identifies
products of



No. 141 Self-Propelled—Big Capacity Champion

Measured by capacity to cut and clean-thresh, or by any other yardstick, the great McCormick 141 stands alone as today's biggest money's worth in self-propelled combines. Here are all the unmatched benefits of McCormick cutting, feeding, threshing and separating combined with such important operator advantages as 28 travel speeds—change on-the-go; hydraulic platform operation; convenience of all controls; new seating comfort; optional power steering and hydraulic brakes. And the big 60 hp engine lets you cut and clean-thresh where others can't!

NEW NO. 76 PULL-TYPE

with 6 or 7-foot platform. Has the capacity to handle the heaviest crop. Straight-through design. 3-point separation and exclusive double-shake cleaning. Pto or engine-drive.

NEW NO. 140 PULL-TYPE

Available with 9-foot platform to handle up to a 16-foot windrowed swath. Has the same capacity to clean-thresh as the champion McCormick 141. Pto or engine-drive.

35-545

INTERNATIONAL HARVESTER

STILBESTROL

and YOU

Faster and cheaper gains are now possible on cattle for slaughter, from this hormone-like substance now authorized for use in Canada

by H. S. FRY



[Bob Taylor photo]

Experiments have indicated that all fattening cattle responded favorably to stilbestrol in proper amounts.

SINCE late in March, it has been legal in Canada to feed *stilbestrol* to beef animals intended for slaughter, and weighing not less than 600 pounds. This product has been admitted to use in the United States, under the same conditions, for something more than 18 months. In Canada, investigations by the Department of Health and Welfare, Ottawa, and feeding tests in the Department of Animal Science, University of Manitoba, provided the necessary supporting evidence that stilbestrol can be used safely here.

But what is stilbestrol—or more correctly, perhaps, diethylstilbestrol? A scientist recently described it as “a synthetic estrogenic compound, closely resembling the natural female hormone estradiol in its metabolic effects.” In simpler language, it is a man-made chemical combination, or compound, resembling estradiol, which, in turn, is a hormone associated with estrous, or “heat,” in female mammals. Because of this association, such natural substances, as a group, are called estrogens. Hormones are of many different kinds and are found in both plants and animals. Normally, they are combinations of carbon and hydrogen; and in animals, are secreted directly into the blood stream from the endocrine, or hormone-producing glands, such as the pituitary and the thyroid. Scientists know in many cases what these hormones do, but they are not too sure yet about how they do it.

Stilbestrol was first made, or synthesized, in the late '30's by a British scientist, and until recently it was used only in veterinary and human medicine. It was thought, at one time, that it would prove useful in cases of difficult breeding in animals, but it is not now considered very valuable for this purpose. It is used in human medicine for such troubles as breast cancer, pregnancy difficulties, and where the male prostate gland is effected.

THE first evidence of the value of stilbestrol in animal nutrition was discovered at Iowa State College, a few years ago. Dr. Wise Burroughs, nutri-

tionist, who has been associated with these investigations throughout, told The Country Guide at Ames last month that some hay was being fed then which gave evidence of possessing unusual feeding value. Because the experimental animals gained so rapidly on it, the College scientists wondered if it contained natural hormone material, and found that it did. They extracted it in sufficient quantities and conducted feeding tests, in which it was compared with stilbestrol. They thought that it might be profitable to synthesize the natural hormone, but the tests revealed that the use of stilbestrol was far cheaper.

The difficulty with stilbestrol is that in its pure form—a white powder—it is a very powerful substance. Before it could be used safely, it was necessary not only to test it thoroughly on experimental animals, but to very carefully analyze the meat from slaughtered animals to make sure that no residual, or carryover, effects remained after slaughter, which would affect human beings who ate the meat. Also, because pure stilbestrol is about 200 times as strong as the natural hormone, some method of diluting the stilbestrol had to be developed that would be practicable for farm use in the feedlot. No government would dare to allow stilbestrol to be distributed until this problem was solved.

Stilbestrol can be dissolved only in vegetable oil. Many experiments have gradually made it clear that the most rapid gains and the lowest feed costs are secured when only ten milligrams per day, per animal are fed. To be able to feed these minute quantities with any precision in actual practise, therefore, meant the most thorough and careful mixing. This problem was overcome by developing a “pre-mix” which is usually added to the protein supplement commonly fed to feedlot cattle, at the rate of from 5 to 20 pounds of the pre-mix to each ton of supplement. This method of obtaining dispersion of stilbestrol by the use of a pre-mix is now under application for patent by Iowa State College, and commercially the pre-mix is offered under the trade-name “Stilbosol,” the makers of which hold an exclusive license from Iowa State College.

IN the 1954-55 Manitoba experiment, the only one so far completed and the data analyzed, 30 good western yearling steers were used during a feeding period of 133 days. There was a check group which got no stilbestrol; a second group which received the standard ten milligrams per steer per day, and a third group which were given one milligram for each 125 pounds live weight per day. The steers went into the test averaging

796 pounds when put on feed, and concluded the test at an average of 1,006 pounds. The work was done by Professors DePape, Stringam and Seale. Dr. Stringam told The Country Guide that all animals when slaughtered graded A, except one, “and he was a B grade animal to begin with.”

The average daily gain for the second group fed stilbestrol was very little more than the gain made by the check group, but the lot fed ten milligrams of stilbestrol daily was 2.2 pounds per day, or 21 per cent more than the check group. Feed consumption was 7.5 per cent less. The feed cost per 100 pounds of gain was \$19.40 for the ten-milligram-stilbestrol group, compared with \$22.06 for the check group, and \$22.53 for the group fed one milligram of stilbestrol per 125 pounds of live weight per day. The profit per steer for the ten milligram group was \$23.75, compared with \$14.84 for the check group, and \$15.69 for the other stilbestrol group.

The regulations require that no stilbestrol may be fed within 48 hours of slaughter. This is to make sure of adequate protection to human health. In the Manitoba test, however, some steers were taken off stilbestrol and all other feed, except water, 36 hours before slaughter, and others were taken off stilbestrol and feed 12 hours before slaughter. In the latter group some residual substance was found in the liver, tripe and kidney, but in the group that was off stilbestrol for 36 hours, only minute amounts were left in these organs, at either level of feeding. Based on either the farm weight, or the live packer's weight of the animals, dressing percentage was slightly higher for those fed stilbestrol. There was, however, a slightly higher “cooler” shrink for the stilbestrol-fed animals.

The result of examination of the meat is not yet published, but in general, the Manitoba experiment is in line with 40-odd similar studies in a dozen states and the United States Department of Agriculture. A further test is still under way at the University of Manitoba, this time with good growthy Hereford calves, weighed in at an average of 440 pounds. This time the test is at only one level of feeding for stilbestrol—the ten-milligrams-per-day-per-animal, alone and in combination with the antibiotic aureomycin. This test will not be completed for some time.

A test has been under way at the University of Alberta, where Dr. L. W. McElroy, head of the Department of Animal Science, has reported that at the end of 16 weeks, using a feeder cattle ration, steers fed ten milligrams per day per steer, in one pound of protein supplement, had gained about 15 per cent faster than those not fed stilbestrol and had required 12 per cent (Please turn to page 30)



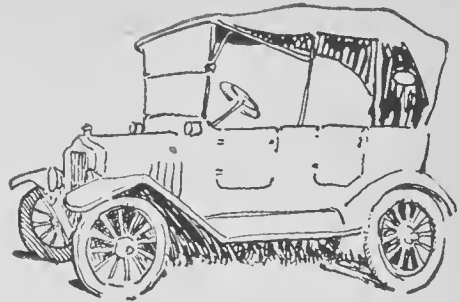
[Don Smith photo]

Stilbestrol has not been licensed in Canada for hogs, sheep, dairy cattle, or any breeding stock.

From Hens to Henry

by JACK SUTHERLAND

Oliver couldn't help it, perhaps, but after all, he only wanted an even break



THE time of year was just before the Calgary Stampede. The hot July sun was streaming down on the suffering fields that a few weeks before we had fondly hoped would make wheat. A southwest wind was pumping the last remnants of the June moisture out of the burning soil.

Oliver Wishmore and I stood in the door of the big granary, which we both knew would see little more wheat than seed for next year, if I was lucky. We looked out at the long strips of dusty summer-fallow, and similar long strips of wilting wheat. We looked over and up to where the busy gravel highway, the last word in road construction at that time, stretched from Saskatchewan far to the East, to the Stampede City of Calgary, nestling in the cool green shade of the Foothills. There was a city that was blessed with, not one, but two living rivers of good clean water. What a joy to think of cool, running water, as we gulped the dust of our withering fields in the strengthening breeze. Would there be a dust storm? We hoped not.

On the big highway we noted the busy travel scene—open touring cars, pick-up trucks, a few sedans, mostly Fords and Chevies. Most of them

contained farm people from the Wheat Province and our Eastern Alberta, who had scraped a few dollars together and said, "To heck with the summerfallow and the burning wheat! Let's take a holiday!" Occasionally, there would be the larger, better car denoting a businessman, with a little more money or credit than the debt-ridden farmers. The year, of course, was one of the terrible and hungry thirties, which so many people today say can never return. However, Oliver and I both ask, "What's to stop them?"

As we watched this stream of westbound traffic, Oliver turned to me. We were then sitting on a wooden drygoods box, with slats nailed across the top. In the box were five Plymouth Rock hens and a rooster, which was my contribution to Oliver's start in farming in the community.

"JACK," he said, "by this time—stampede time—two years from now, these hens will get me a Henry. These chicks will get me a Lizzie, just as good as yours out there in the yard."

"What do you mean?" I asked. "That from those five hens and a rooster that you are going to deal

yourself into something as good as that 1928 Ford of mine that I paid \$800 for four years ago, second hand?"

"The same or better," declared Oliver. "What will you bet?"

"There is no use of an ordinary farmer like me betting with a horse-trader like you," I said. "But let's see you do it, and I will buy the gas to the stampede and back; and it's four days stacking hay for me, if you don't."

"Oliver," Jack said, as he arose from the makeshift chicken coop, "you'd better have your gas ready, and anyway I don't like pitching hay."

"Well," I taunted, "you'd better get muscled up, because we can stack a lot of hay in four days."

The scene was my farm, the original homestead and pre-emption in the dry area of Alberta, where in those tough years we only used to harvest one out of every two crops that we sowed, and sometimes worse than that. The first 320 acres had swelled up to a total of 1,200 or 1,400 acres, which wasn't enough acres when the rains did come and we got a crop, and far too much when they didn't. This was one of those years.

Oliver Wishmore had driven all the way from the southeastern part of Alberta, where, for some years, he had worked as a section hand on the C.P.R. In those years he had accumulated four horses, some straggling bits of leather, buckles and chains which passed for harness, a farm wagon, a dilapidated democrat, some odds and ends which passed for farm machinery, and a considerable accumulation of tools of various types, all of which quite evidently were of railroad ancestry.

Oliver, too, had acquired a considerable reputation as a dealer, or trader, which legend had travelled with and ahead of him to his new home in our community, and which had suffered none in its course over many miles of prairie trail. By the time Oliver took up residence on the half-section rented to him by his father-in-law, we were all on our guard against his qualities as a horse trader, and all that the name implies.

The relationship of father-in-law implies, of course, a wife. Oliver had a helpmate,—one who was indeed keen in appraising values, but, alas, one who did not always approve of the various and innumerable schemes that emanated from Oliver's fertile brain, notwithstanding her very considerable pride in Oliver's accomplishments in the art of rural trading.

Oliver had two basic principles in all his financial ventures. The first was that he would never lower his dignity by begging, or definitely asking for anything. Instead, with great care and cleverness, he would instill into your mind, an idea of which you would think you were the originator, by having given Oliver a thought, to which the conversation in some mysterious way had drifted. The general philosophy thus cultivated was that everyone would be benefited, first the original owner of the article, or commodity, and second, the whole community, by such a transfer.

His second principle was that all such transfers must be on the basis of a regular trade, and not a gift.

Oliver's ancestry was indefinite, convenient, and commercialized to the highest possible degree, a feature to which he gave most careful consideration. He was most concerned that this ancestry should be adaptable. For in— (Please turn to page 69)

Illustrated by
Clarence Tillenius



"By this time—stampede time—two years from now, these hens will get me a Henry," he said.

Rothamsted

and

BROADBALK FIELD



The famous Broadbalk field at Rothamsted Experimental Station, England, where wheat has been grown since 1843. One-fifth is now fallowed each year.



The director with Canadian students: Ed Peterson, Ottawa; Harold Welch, Belleville; Sir Wm. Ogg, director; Helen Salkeld, Ottawa; and the author.

MENTION Broadbalk wheat field to any soil scientist the world over and he will know the field you have in mind. Many a practical farmer, too, has studied the results of the fertility experiments on Broadbalk, for they have been carried on for well over 100 years. In fact, nowhere else in the world have experiments of this type been carried on for so long, in the same manner, on the same fields. It is this long-time feature in the use of fertilizers and manures that makes the field so famous.

The Broadbalk wheat field is, however, only a small part of a much larger research center, the Rothamsted Experimental Station. This is a 527-acre area, located 25 miles northwest of London, England, in Hertfordshire. There are large laboratories, greenhouses, and farm buildings, all surrounded by fields and experimental plots. A large library contains the latest agricultural publications, as well as a fine collection of works of historical interest. Near the center of the Station is the old Manor House, where, for centuries, lived the owners of the Rothamsted estate; and near the farm buildings, close to a stack of baled straw, are the remains of a Roman Temple built about 100 A.D.

A large number of trained scientists are at work at Rothamsted on many different agricultural problems; and there is a constant stream of visitors and part-time workers from all over the world, so that there is

almost an international atmosphere. Indeed, the problems being investigated are not restricted to English farming conditions. They are often connected with special problems in other parts of the Commonwealth. Much of the basic research being carried on concerns agriculture everywhere—the chemistry and physics of soil, soil microbiology, biochemistry, plant pathology, and so on, to name just a few of the departments. Many of the scientific workers here have won world recognition in their fields of research. In 1943, the Soil Science Society of America, meeting at Cincinnati for their annual convention, celebrated the Centennial of the Rothamsted Experiments, with special reports and papers on the achievements at this British research center.

EXPERIMENTAL work was begun here, by John Lawes (later Sir John Lawes), who took over the estate in 1834 and was interested in the use of chemical fertilizers. It was in 1843 that he laid out the famous experiment in Broadbalk field. Wheat was sown on this field every year until 1925, when a partial fallowing program was started. The fertilizer treatments started by Mr. Lawes have been continued without major changes since 1852. Also begun at that time were other experiments, on the fertilizing of barley, hay land, and root crops; and other tests were laid out to measure the value of fallowing and rotations. Some of these tests, too, are

Where grain has been grown without fertilizer or manure, for 113 years, and fertilizer tests continued for more than a century

by J. A. TOOGOOD

still carried on. A chemist, Henry Gilbert, came to work with Mr. Lawes in 1843, and by the end of the century, the team of Lawes and Gilbert had become famous in the world of scientific agriculture. In 1934, the estate was purchased by the Lawes Agricultural Trust, and the farm is now, therefore, an experimental station, managed along much the same lines as our Central Experimental Farm at Ottawa. The Manor House has been converted into a Hall of Residence, though much of the old 13th century fabric of the building has been carefully preserved.

The report of the Station for 1954 shows that over 3,000 visitors came to Rothamsted. Also during that year, over 40 scientists from 22 countries, including Canada, United States, India and Germany, to mention just a few, spent part of the year working at Rothamsted and getting acquainted with the latest developments in agricultural research. At the present time there are four Canadians working at Rothamsted. Two are graduates in agriculture working toward advanced

degrees. Ed Peterson, a graduate of the University of Alberta in 1950, hails originally from Bashaw, in that province. Since graduating in Alberta he has been at the Central Experimental Farm, Ottawa, and now is doing advanced work here in soil microbiology. Harold Welch, a graduate from Toronto, is finishing up his work on an advanced degree in the field of nematology and will soon be returning to Belleville, Ontario. Miss Helen Salkeld will be back in Canada when this appears in print, having completed a research project on insecticides at Rothamsted, while on leave of absence from Science Service, Ottawa. Miss Salkeld is a graduate of O.A.C., Guelph. The writer spent the winter on research work in soil physics, while on sabbatical leave from the University of Alberta.

Due to the fact that Sir John Lawes erected a factory for the manufacture of superphosphate in 1843, and continued until 1872 his interest in this business, it has sometimes been claimed that the Rothamsted experi-

(Please turn to page 35)

The main laboratory building at Rothamsted. This research center draws together students and agricultural scientists from many parts of the world.



Guarded Gold

by S. OMAR BARKER

ATOP the fat doughnut of greyish earth mounded up around the entrance to his burrow, Tusa sat erect on his haunches and barked. The hoofs of the jogging horse nearly half a mile away made dust rise from the barren flat in thick puffs of fine, whitish powder, symbol of long drought in a droughty land. But overhead black clouds were thickening ominously, yeasting for a rain.

The dusty rider eyed them exultantly. That the promised down-pour would revive and refresh the thirst-parched range did not concern him. Even the fact that it would settle the stifling dust that clogged his thin, foxlike nostrils was not of first importance to Little-foot Fritz Vaxon. What he wanted a cloudburst for was to relieve him of his tracks, for in his saddlebags rode gold, and somewhere behind him, almost certainly, a posse.

Neither the sudden crash of thunder across the black sky, nor the first big spattering raindrops stopped the shrill chatter of Tusa, the prairie dog. He raised higher on his hind legs, his slightly bulging, bright little eyes fixed on the distant rider, the black tip of his tail jerking in rhythm with the sharp, nasal yap-yapping by which he sought to give warning of approaching danger.

Actually he was wasting his breath, for, of the scores of burrows scattered over the barren flat, only his own was occupied. The whole "dog town," starved out by drought, had migrated only a few days before, moving closer to the hills to dig new burrows where there still remained some rooted grass upon which they could feed. Tusa would have gone with them, but snuggled deep in his burrow were his young mate and a litter of five youngsters born late in the season and still

too small to travel. Thus, as the rest of his fellow townsmen moved out a few at a time, Tusa and his family had remained.

All at once the threatening clouds let loose, the big-dropped rain came beating down, and Tusa ducked into the dry security of his hole. Presently the flat would be flooded, but the doughnut of earth around his doorway would serve as a dam to keep the

wood. Now he rode back, uprooted it as best he could, brought it back and set it out again near one of the burrows as a marker lest he find it troublesome to locate his precious caches when the time should be ripe to return for them.

Little-foot Fritz congratulated himself as he rode away. The recently dusty flat was sloshy with water now, and it was still raining. There would

murder of the two men he had shot to death from ambush for the sake of the gold they guarded.

Soberly he joined with the rest of the six-man jury in their verdict that "Tomas Lopez, stage driver, and Earl Hollister, guard, came to their death from lead bullets fired from a rifle in the hands of a person or of persons unknown."

Little-foot Fritz had called himself smart, and he was. Not the least important part of his smartness was his patience. For almost a year he went on about the monotonous business of being a thirty-a-month line rider for the K3, forcing himself to forget for the time being that he had a small fortune in gold buried in a deserted prairie-dog town. For almost a year he was careful never to ride even within a mile of it, for fear he could not resist the temptation to take a look and see if the caches were still there.

If Little-foot had not believed the dog town to be a wholly abandoned one he might have felt some concern for what the prairie dogs might do to his five caches. For those fat, buffy squirrel-like rodents are industrious diggers. Inhabited burrows might also be dug into by some wandering badger in search of a dinner of the fat, tender tusa meat that suits the badger so well. But Little-foot felt sure this particular dog town was deserted, else he would surely have been scolded by anywhere from ten to twenty yapping sentinels as he rode into it.

Thus he managed not to worry too much while he waited for the time when he could sneak his stolen wealth from its hiding place and quit the country. Along late in the spring, as part of his plan for leaving his job without suspicion, he began to complain of chronic headaches. He bought himself some smoked glasses to wear and mentioned casually to one person and another that it looked like he just couldn't seem to stand this southwestern sun any more. Maybe he'd have to quit and pull out one of these days. Drift up into the Wyoming hills,

(Please turn to page 44)

The smart and lucky Little-foot Fritz was certain that the last place anyone would look for stolen money would be down a prairie dog hole, in an abandoned dog town. The quiet cowhand had patience to wait before returning to his cache. But he did not know of Tusa and of the constant struggle for existence in arid places

water out of the burrow unless it got somewhere around a foot deep.

Ordinarily Tusa might have remained at his alarm post until the rider came within

a hundred or a hundred and fifty yards. This time, thanks to the storm, he had ducked even before the man caught sight of him.

Coming upon this prairie-dog town apparently entirely deserted had given Little-foot Fritz an idea. Heedless of the pelting rain, he dismounted and went to work. Into each of five burrows he shoved a small canvas sack, heavy with gold coins that had been intended for the Split Hill Mining Co.'s payroll. At elbow length within the holes he scratched out little pockets alongside the passage and wedged the sacks into them. He anchored them there by tying their draw strings securely to short stubs of drought-killed desert milkweed which he drove into the packed earth with the butt of his gun as well as he could. Some distance back, outside the "city limits" of this dog town, he had noticed a forlorn clump of grease-

be no telltale tracks. That was pure good luck. But Little-foot considered himself not only lucky but smart. The last place in the world that anyone would look for stolen money would be down a prairie-dog hole.

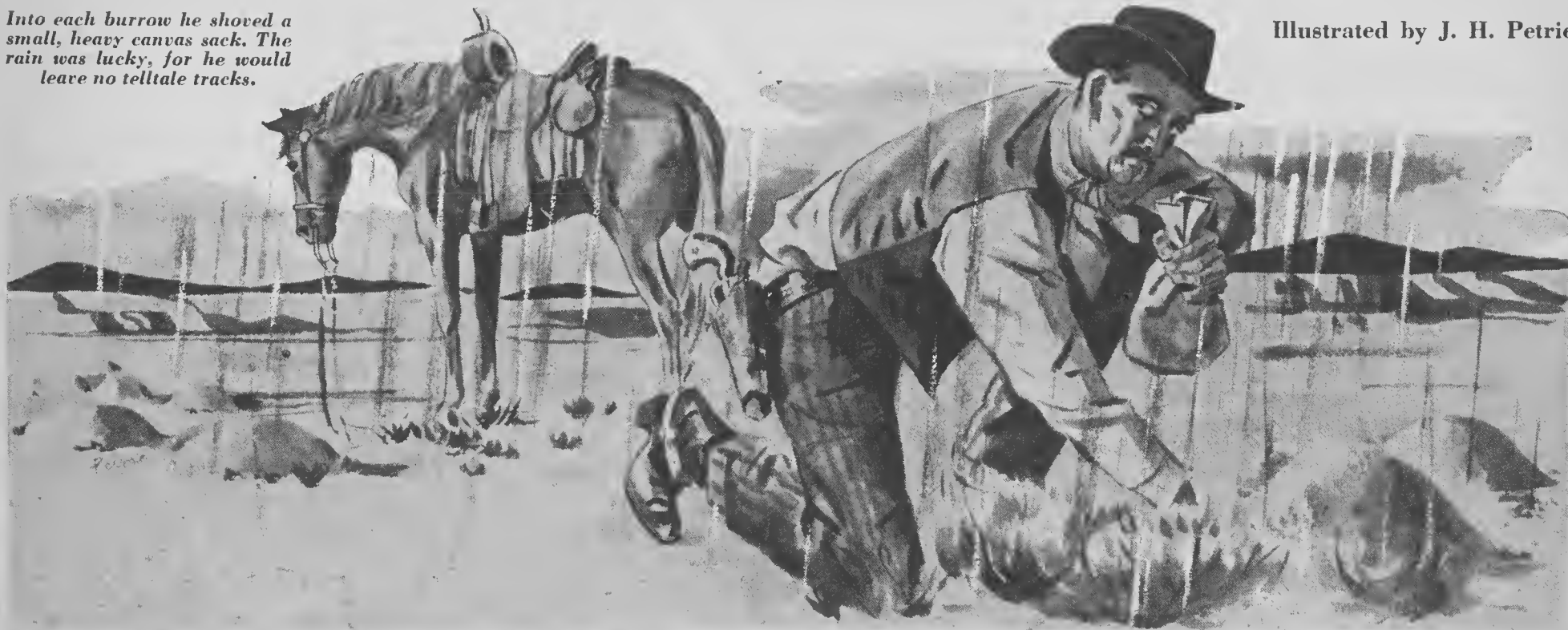
THE next day in La Cinta, Little-foot heard with convincing surprise that the Split Hill mines had lost their payroll. Immediately he went to Sheriff Catlitt and offered his services.

"That stray line I'm ridin' don't have to be covered more'n ever' two-three days, Sheriff. Between times, if there's anything I can do—"

"Thanks, Little-foot," Catlitt answered. "I may call on you. But it ain't men I'm needin' right now, it's information, clues, tracks—any damn thing to help us figger who pulled this here holdup and where he's got away to since this rain. You stayin' for the inquest? Might need you to sit on the jury."

Thus Little-foot Fritz, a quiet, ferret-faced cowhand who had never been suspected of any wrongdoing in the three years he had ridden line for the K3 outfit near La Cinta, now sat on the coroner's jury, as grimly indignant as any of the other jurors over the

Into each burrow he shoved a small, heavy canvas sack. The rain was lucky, for he would leave no telltale tracks.



Illustrated by J. H. Petrie

Which Weed Killer— 2,4-D or MCP?

Here is a run-down of experimental tests of these chemicals across Canada. You pay your money and take your choice

by RICHARD COBB



[Univ. of Manitoba photo]

The oat plots, treated at the 1-2 leaf stage with 4 oz. of herbicide, show greater tolerance to MCP (left) compared with the 2,4-D treatment (right).

WHEREVER man has cleared the wilderness and plowed the land to grow food, he has started a never-ending fight. His choice of some plants as crops, condemning the remainder to be weeds, has been cheerfully disregarded by nature, which impartially supplies both with the food they need.

Thanks to the rapid development of chemical herbicides in the last few years, crops now have a powerful weapon on their side, but the problems of weed competition are still serious. H. E. Wood, Manitoba Weeds Commissioner, has estimated that in 1955 the loss per farm, caused by weeds in western Canada, averaged \$1,000, and this may be an underestimate. North Dakota Agricultural College reckons that weeds cost farms in the state about \$60 million a year by competing with crops for moisture, food and sunshine; by causing extra tillage expense and delayed seeding; by dockage and the lower market quality of crops; by limiting the crops which can be grown, and lowering land values.

Herbicides, too, add to the cost of production, but Mr. Wood calculates that last year, for an outlay of \$10 million for chemicals and their application, western Canada saved 53 million bushels of wheat, barley, oats and flax, valued at \$56 million. This was the result of spraying 14 million acres out of a possible 30 million.

The value of chemical control of weeds has been summed up by Prof. L. H. Shebeski, head of the Plant Science Department, University of Manitoba, in these words: "As long as weeds such as wild mustard—readily controllable by inexpensive chemicals such as 2,4-D and MCP—are present in any quantity, the farmer of today just can't afford not to spray. There is no cheaper insurance for maintaining high production."

Dr. Shebeski made weed counts last spring, choosing farms in Manitoba at random, and found that when grain was in the three-leaf stage, there was an average of 285 broad-leaved weeds per square yard. Some of these fields appeared to be quite clean when seen from the highway.

THERE is now a wide range of chemicals available, but D. A. Brown of the Brandon Experimental Farm, says that, without doubt, 2,4-D

and MCP are by far the most important herbicides because of their wide adaptability and use. These two were developed during the last war, when the Allies were looking for chemicals which could destroy enemy crops. Fortunately, the need did not arise, but at the end of the war the United States had stockpiled huge quantities of 2,4-D, while Britain and other European countries were producing MCP. Both were effective against most broad-leaved weeds, and caused relatively little injury to cereals, flax and grasses, if properly handled.

North America chose 2,4-D, because it acted faster and appeared to give a better weed kill, but Europe preferred MCP, believing that it permitted higher crop yields. In this way, selective spraying for weed control became the recommended practice, and for the past nine summers, Canada has been using 2,4-D principally for this purpose.

These two are known as phenoxy compounds. 2,4-D is available in ester, low-volatile ester, and amine formulations, and MCP as ester, low-volatile ester, amine and sodium salt. The esters are the strongest, amines next, and sodium salt is mildest. In general, they have the same effect, except that some weeds are more susceptible to

2,4-D, and others to MCP. The main question to be answered in choosing between them is whether the slightly higher cost of MCP is compensated for by the tendency of 2,4-D to be more harmful to some crops.

A CO-OPERATIVE project was set up by seven experimental farms of western Canada in 1954, to establish the status of MCP as an alternative to 2,4-D. The different formulations of each were applied at four and eight ounces per acre to annual weeds in cereals and flax at the seedling stage, with weeds at two to three inches high, and later at the bud stage.

H. A. Friesen, agronomist at the Lacombe Experimental Farm, reporting on the results, said that 2,4-D esters gave satisfactory control of Russian thistle, and the amine only less so, but MCP was inferior. On the other hand, MCP ester killed 30 per cent of hemp nettle and suppressed

the survivors to less than 30 per cent of normal, while 2,4-D gave only a temporary setback to this weed. Neither chemical killed or effectively controlled wild buckwheat, but leaf-feeding beetles at the Experimental Farm, Scott, Saskatchewan, obligingly removed the buckwheat from the test plots.

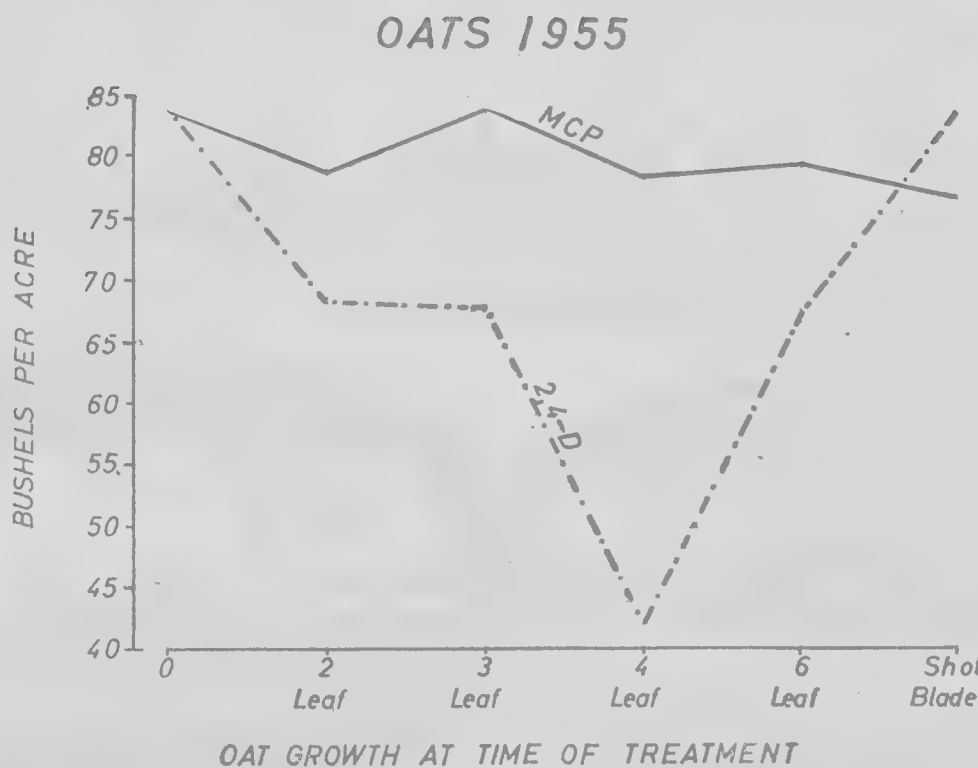
Flax yielded best when treatment was at the early seedling stage. MCP generally gave higher flax yields than 2,4-D, and by a wide margin at the later spraying date. But at Lethbridge, where Russian thistle was the major weed, 2,4-D amine and ester gave the highest yields at early treatment, while MCP ester increased the yield only at the later spraying date.

The 2,4-D plots needed four to 11 days more to mature than MCP plots; and untreated plots were one to two days earlier than where MCP was sprayed. The maturity date is important in short seasons, as was shown at Melfort, Saskatchewan, Experimental Farm, where the untreated flax crop contained 30 per cent frozen seed, with MCP the seed was 40 per cent frozen, and with 2,4-D over 65 per cent.

MCP was found to be better for oats. 2,4-D reduced the yield significantly at Scott, after early spraying, but MCP at both dates, and 2,4-D later, did not influence the yield significantly. 2,4-D failed to suppress hemp nettle at Lacombe, and injured the oats, while MCP killed and suppressed hemp nettle and increased oat yields. It was concluded that the additional cost of MCP was more than offset by improved yields as the result of early spraying.

Wheat and barley at the 4-6 leaf stage were not adversely affected by either chemical, at the recommended rate. 2,4-D was preferred because of its lower cost, except where the major weed was less susceptible to it, or when treatment was given before the

(Please turn to page 67)



Comparative tests at the University of Manitoba with MCP and 2,4-D showed that 2,4-D, unlike MCP, cut oat yields when weeds were more susceptible.

ANNOUNCING NEW GMC LINE FOR 1956

with world's widest choice of engines, transmissions and rear axles!

GVW's ranging from 5000 to a walloping big 59,000 pounds

More than ever, GMC Trucks are built to take it. Higher GVW's and stronger frames right down the line mean more payload weight at lower cost. Better still, with GMC's wide choice of GVW's, you match your truck to the job. See your GMC dealer now!

**V8 or 6 power plants
gasoline or diesel power plants
ranging from 140 to a mighty 225 h.p.**

Twelve gasoline engines—both V8 and 6—and 3 powerful diesels make it easy to match your power plant to any load requirement. Yes, GMC offers you the widest choice, with horse-powers ranging to a mighty 225.

Standard transmissions with up to 10 forward speeds, three automatics, including revolutionary new-principle "Powermatic"

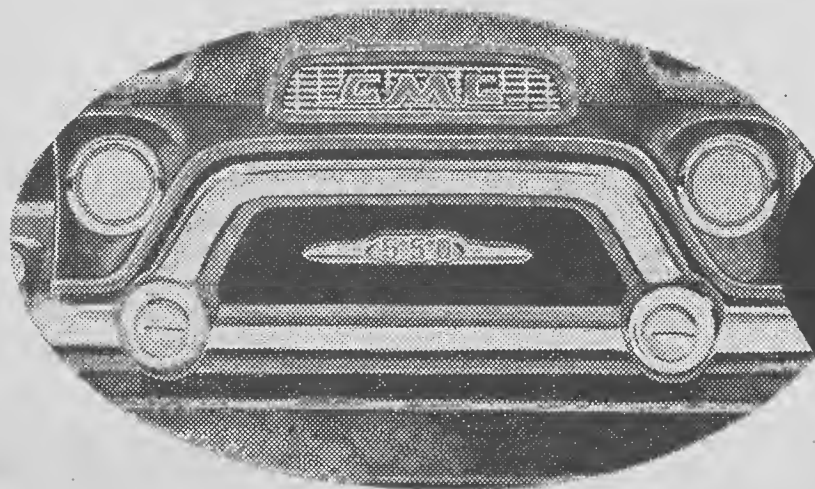
3, 4, 5—up to 10 forward speeds and 2 reverse. Name it—and GMC's got it in standard transmissions. Automatic transmissions, too—three of them—Single Hydra-Matic, Twin Hydra-Matic and sensational new "Powermatic", an entirely new principle in automatic operation.

Widest range of heavy duty rear axles with greatly increased carrying capacities

There's virtually no limit to the number of rear axles and ratios available with GMC trucks. Whatever hauling job or load conditions you have, GMC has the axle to handle it. Ask your dealer about GMC's revolutionary "Triple Torque Tandem"—the newest and *best* thing in heavy duty tandems.

the truck with the greatest choice of everything

A GENERAL MOTORS VALUE



Under the Peace Tower

by HUGH BOYD



IT is generally conceded that there is difficulty in unhorsing a government when times are good. Along the farm front the present federal government may be vulnerable, but the country as a whole is in the grip of a boom. Given much the same conditions a year hence, when an election will likely be held, it might be hard for the opposition forces to make much headway on strictly economic issues, over a large part of Canada.

But an appeal to national sentiment could be something else again. An emotional issue could be a lifesaver to an enfeebled opposition, if it discovered one on which a sufficient number of Canadians feel strongly, not just lukewarm.

Events of recent weeks suggest that the Conservatives, who still remain the logical alternative to Liberal rule, have found the kind of issue to make a political party drool. Not a synthetic issue, but something about which an increasing number of people are beginning to have rather uneasy thoughts—the extent of American participation in Canada's economic development.

THERE is nothing particularly new about the fact that American enterprise is active on this side of the border, but the proposed Alberta to Quebec natural gas pipeline has served more than anything else to fasten public attention on it. Whether this project is urgently needed as of today, rather than tomorrow or the day after, may be open to question. The fact is that a predominantly American group has an agreement with the federal and Ontario governments to operate a pipeline built in part by itself, and in part—over a section that no private company would touch at present—, by these two governments.

The plan is hideously complicated by exchanges of gas exports and imports, and by a maze of conflicting interests in current hearings before the United States Federal Power Commission. Out of all this emerge impatient cries for an all-Canadian pipeline under private auspices (Conservative proposal) or entirely public ownership (as the CCF would like). But the suspicion grows that an all-Canadian gas pipeline effort from west to east that avoids money-making exports to the U.S. will require subsidies—paid for by Canadians from one coast to the other, including many who might prefer national assistance going into the development of water power, or some other kind of regional endeavor.

Be this as it may, a certain amount of excitement has already been generated by the thought of cigar-smoking Texas oil tycoons taking over one of the biggest and boldest transport plans on Canadian soil since the launching of the first transcontinental railway.

MEANWHILE, there is a growing awareness of the undoubted fact that many American ventures in this country have not given much opportunity to Canadians to share as in-

vestors, or in the field of management. The government has been forced into a defensive position on the whole question of the benefits, or otherwise, of the large-scale entry of U.S. capital—and a defensive position is unusual for a party that has ruled the land for upwards of a quarter of a century.

Into this troubled picture stepped the retiring U.S. ambassador, Mr. Douglas Stuart, a businessman with connections in western Canada, but no smooth career diplomat. Mr. Stuart thought the talk of American economic imperialism was a lot of nonsense, and said so at Vancouver. His chief mistake was in turning his fire on the leader of the Conservative party; and while he did not identify him as such, but only as a "prominent Canadian," the attendant quotations left no doubt whatever. Thus the Toronto Globe and Mail could quite legitimately headline the Vancouver report thus: "U.S. Envoy Belittles Peril of Control of Resources. Calls Drew's Blast Emotional Appeal. Like Communist Caricature."

The retiring ambassador's farewell speech might well seem like money in the bank to the official opposition. Here in Ottawa it's being said that the Conservative party has been handed the best fighting issue since

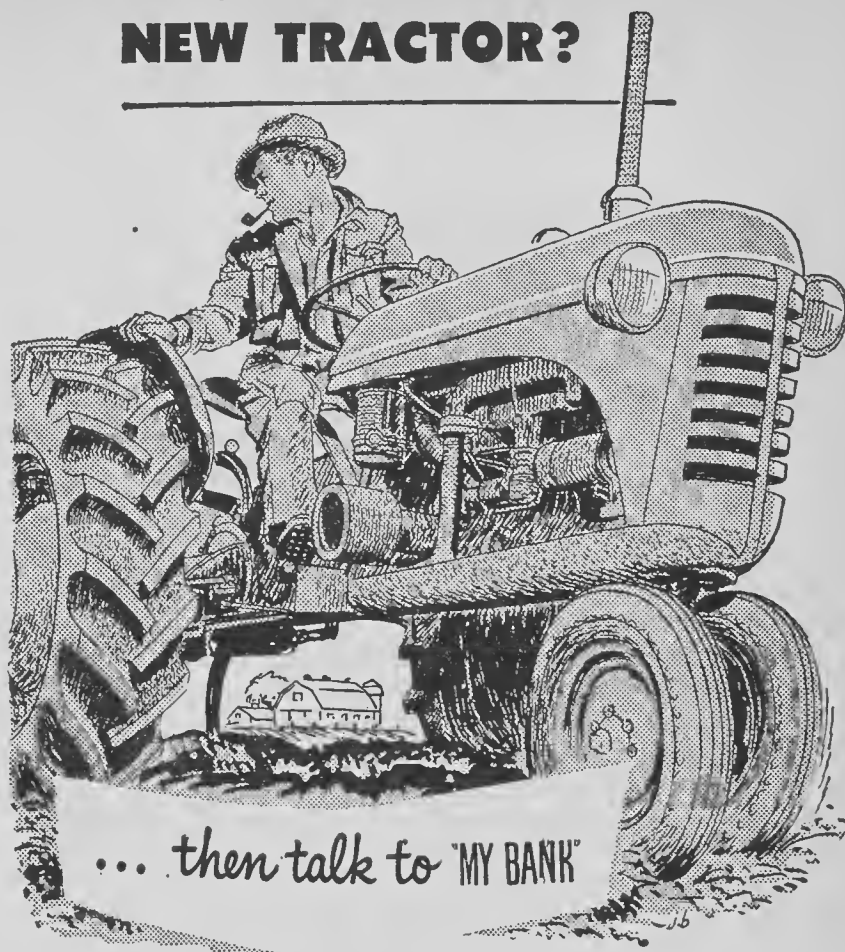
The only guide to a man is his conscience; the only shield to his memory is the rectitude and sincerity of his actions. — Winston Spencer Churchill.

1911. The old-timers speculate on what R. B. Bennett would have done with it. They incline to discount his successor; yet they could be very wrong in their estimate of today's Conservative leader, notwithstanding the complications of third and fourth parties on the national scene. One point in Mr. Drew's favor is that he has been personally endorsed by the electorate on three political levels—municipal, provincial and federal—which is more than can be said for most of his opponents, however brilliant.

However, it must be said that most observers here who are reasonably close to being unbiased, still hold to the opinion that the present-day Conservative party doesn't know how to handle a good issue when it discovers one. Time will tell. V

Do you need a

NEW TRACTOR?



If you need a new tractor on your farm, but haven't the ready cash to buy one... FIL may be the answer to your need.

A B of M Farm Improvement Loan can put you at the wheel of the latest model very quickly. And there's nothing that saves money, time and work on a farm quite so much as a modern tractor.

If your proposition is sound, you can get a B of M Farm Improvement Loan for any type of equipment you need on your farm. Why not talk to your nearest B of M manager? He'll gladly show you how a Farm Improvement Loan can help you in your operations... and how little it costs.



BANK OF MONTREAL

Canada's First Bank

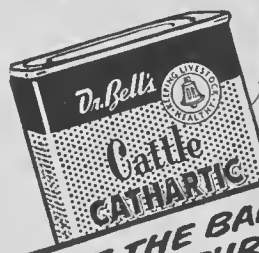
WORKING WITH CANADIANS IN EVERY WALK OF LIFE SINCE 1817

FIL — the fixer... his full name is Farm Improvement Loan. Give him a chance to help fix up your farm... he's economical, convenient, versatile. He can do almost anything in making your farm a better farm.



Helpful Suggestions for solving many farm problems are found in every issue of The Country Guide.

DON'T try half measures!



USE THE BALANCED BOVINE PURGATIVE

Dr. Bell's

COPENHAGEN



"THE WORLD'S BEST CHEW"

MORE BASKETS for your EGGS...

Diversified farming is good business... you're never left at the mercy of a single market. And Elephant Brand fertilizers can bring you greater profit no matter what you produce!

Wheat, barley, oats, flax, sugar beets, potatoes... whatever your crop, Elephant Brand high analysis fertilizers applied in recommended quantities will help it grow healthier, more abundantly by supplying the plant food it needs. And you can actually fatten livestock with fertilizer... indirectly, of course. Elephant Brand increases the number of head you can carry on your pasture land by promoting heavier growth.



Ammonium Phosphate 11-48-0
Ammonium Phosphate-Sulphate 16-20-0
Ammonium Nitrate Phosphate 27-14-0
Ammonium Sulphate 21-0-0
Nitraprills
(Ammonium Nitrate) 33.5-0-0
Complete Fertilizer 10-32-10



ELEPHANT BRAND FERTILIZERS

manufactured by **COMINCO**

THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED

CF-4

GET MORE FROM YOUR LAND WITH ELEPHANT BRAND

Better, Easier Grooming
with **Sunbeam**
STEWART
ELECTRIC GROOMING
BRUSH



GROOMS
Dairy
Cattle
and other
Farm Animals

This new, all-purpose rotary grooming brush will do a better, faster and easier job of cleaning farm animals. Ideal for dairy cattle. Massages the skin, gives beautiful luster to hair. Nylon bristles remove loose hair, embedded dust and dirt. For 110-120 volts AC-DC. Complete unit includes air-cooled, ball-bearing motor as illustrated. Grooming brush head also available as an attachment for Clipmaster or Shearmaster.



SUNBEAM CORPORATION (CANADA) LTD.
TORONTO 18



Planet Jr.
Cultivator
Steels of Quality
and Performance

Yes—they do give satisfaction! They have proven themselves by years of prairie use — They're "Planetized"—Hardened and Tempered from Special analysis high carbon steel.

Over 200 shapes
for every purpose.

**BUY THEM
FROM YOUR
LOCAL
DEALER**

C.C. KING & COMPANY LTD.

1485 ERIN STREET, WINNIPEG 3, MAN.

GET IT AT A GLANCE

World Farm Reports in Brief

World cattle numbers total 918 million head this year, showing an increase of six million in the past year. Hogs increased slightly in the past 12 months, and are now at the record total of 373 million. ✓

Herta barley, a Swedish feed variety recently licensed in Canada, is being distributed in Manitoba this spring in two-bushel allotments through agricultural representatives. ✓

An experiment in milk promotion has been started in New Brunswick, where producers, distributors and government have formed the Saint John Area Milk Committee, to boost milk sales. ✓

The Danish dairy industry has begun a world-wide sales campaign, and will give away millions of samples of butter and cheese at exhibitions and fairs in Europe and North America. ✓

Fatal accidents on farms in Saskatchewan amounted to 86 in 1955. Tractors claimed 23 lives, and farm fires took 19. ✓

Dr. A. E. Hannah, who has been appointed head of the Barley Unit, Experimental Farms Service, Ottawa, is succeeded at the Cereal Breeding Laboratory, Winnipeg, by A. L. D. Martin, who will be in charge of oil seed breeding and research. ✓

The Farmers Union Central Exchange of St. Paul, Minn., is celebrating its silver anniversary this year. The co-operative now has an annual volume of business amounting to \$62 million. In 1931 it was \$906,300. ✓

Frozen semen pioneers, the Waterloo Cattle Breeding Association, Ont., have inseminated more than 65,000 cows by this means since December, 1954, with a conception rate of 67 per cent. ✓

Dawson Creek Credit Union, B.C., the largest community credit union in North America, reported total assets of \$1,800,000 in 1955. Prince Rupert Fishermen lead all other credit unions with \$2 million. ✓

Foot-and-mouth disease may be conquered following the growing of the virus in test tubes on a large scale, according to the U.S. Department of Agriculture. This makes possible the development of a vaccine against the disease. ✓

Cereals for the north are being developed by the Beaverlodge Experimental Farm, with the help of the University of Alberta and the Science Service Laboratory, Edmonton. Hybrids will be tested at Fort Vermilion and Prince George, B.C. ✓

Amherst, Nova Scotia, will be the site of the 1956 annual meeting of the Canadian Seed Growers' Association in June. Nova Scotians will take the opportunity to tell delegates from other parts about life in the Maritimes. ✓

New durum wheats, said to be resistant to 15-B stem rust, are being

planted in North Dakota this year. Langdon, Towner, Ramsey and Yuma—the new varieties—were developed by North Dakota Agricultural College and USDA. ✓

Saskatchewan Quarter Horse Association, which was formed recently, aims to encourage this pure breed. Of 131 registered quarter horses in Canada, 13 are in Saskatchewan. ✓

Sales of fluid milk and cream amounted to 5,330 million pounds in Canada last year, exceeding 1954 by 230 million pounds. Butter production in the prairie provinces has remained fairly constant at 83 million pounds annually in the past five years, but Ontario and Quebec have raised their production from 150 million to 209 million pounds in the same period. ✓

Washington State College has developed a new meat-type hog known as Palouse, as the result of inbred crosses between Danish Landrace and Chester White. ✓

B.C. Co-operative Wholesale Society increased their business by 21 per cent above 1954 by recording \$1,538,558 last year. ✓

Manitoba sugar beet growers are receiving about \$2,750,000 for last year's crop. This is \$150 gross return per acre for 850 farmers. ✓

Australian and New Zealand cattlemen will tour Canadian and United States beef production and packing centers late this year. They will also visit the Royal Winter Fair in Toronto. ✓

The International Congress of Entomology in Montreal next August should be of great interest to Canadian farmers. Losses from insect damage to livestock and field crops cost them \$312 million a year. ✓

Dr. Michael Shaw, professor of biology at the University of Saskatchewan, has been awarded \$1,100 by the Lalor Foundation for basic research on the physiology of wheat rust during the summer. ✓

United Kingdom farmers were awarded an additional \$70,600,000 by the farm price review this year. Guaranteed prices for cattle, sheep and milk were raised. Wheat and rye prices were decreased, but barley and oats were increased to save on imported feeds. ✓

Canadian farmers received 46 cents of each dollar spent on food of Canadian origin last year. This was the same as 1954, but two cents lower than the 1949-55 average. Retail prices were 11 per cent above 1949. ✓

Fresh concentrated milk, developed by the University of Wisconsin, is mixed with water and is said to taste like fresh milk. It has good keeping qualities. ✓

Louis Bromfield, the noted author, who died in Columbus, Ohio, recently, will also be remembered for his experiments in conservation and scientific agriculture on the famous Malabar Farm, where overworked land was put back into production. ✓

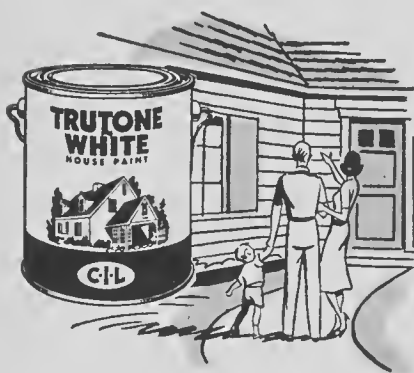
Show pride in your farm!

C-I-L PAINTS BEAUTIFY AND PROTECT ...YET COST SO LITTLE

Good paint costs less because it goes further . . . takes less paint and less work. C-I-L paints have the high hiding and long-wearing qualities which give you more value for your paint dollars.

There's a C-I-L Finish for Every Painting Need

SAVE with ONE COAT hiding



Your pocket-book — and your home — will welcome C-I-L Suburban Colors. Here are colors that give modern beauty to new homes . . . fresh zest to older ones.

If you prefer white, TRUTONE WHITE will give you the whitest house in your neighborhood. TRUTONE WHITE actually cleans itself . . . *stays* white years after ordinary paints have turned dirty and gray.

Stylist Colors . . . modern as tomorrow!



Stylist Colors offer you literally hundreds of entrancing combinations to make your home glow with new beauty. They come in CILTONE odorless alkyd enamel in Flat, Semi-Gloss and Gloss, and in SPEED-EASY SATIN latex wall paint.

Folks who like to do it themselves welcome Stylist Colors. They're so easy to use with either brush or roller. Washable, too, and cost so little.

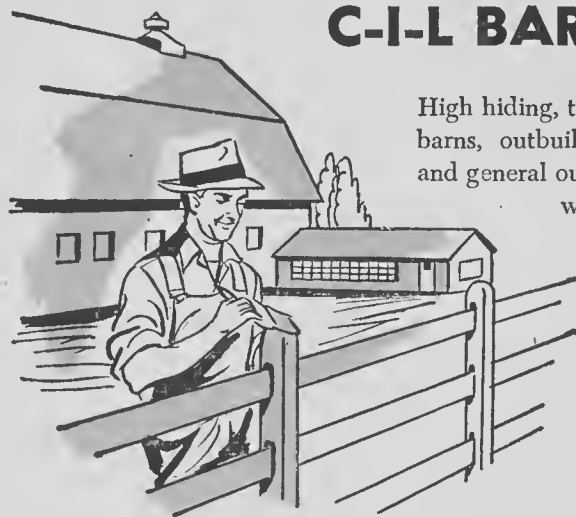
"ONE COAT MAGIC" for Kitchens and Bathrooms



CILUX Enamel comes in so many colors, has so many uses . . . makes it easy to plan tasteful color schemes. Every color harmonizes with all the others. For wood or metal, furniture or tractors, indoors or out.

For the whitest of white enamels, get CILUX Super White. Easy to clean, stays white year after year.

C-I-L BARN PAINT



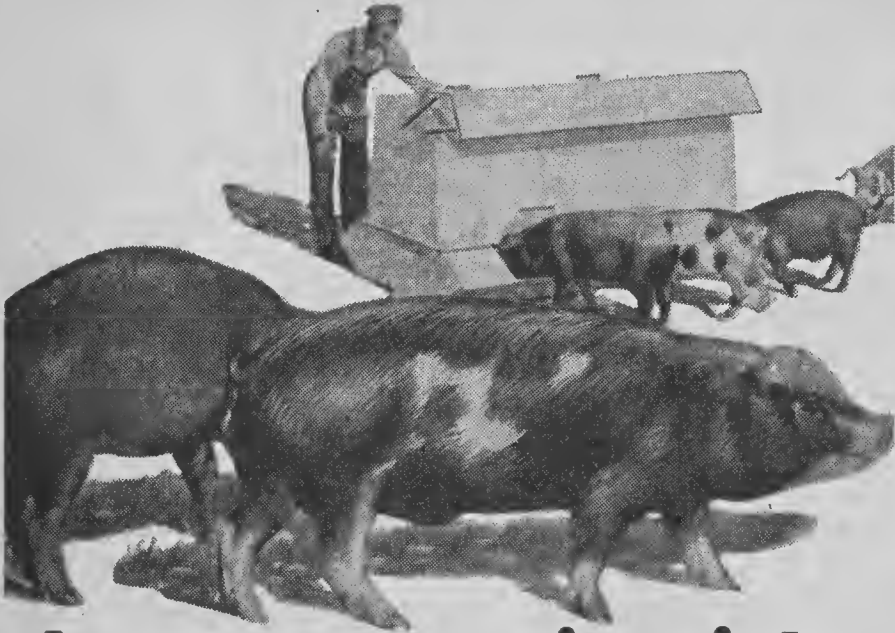
High hiding, tough and durable. For barns, outbuildings, roofs, shingles and general outside painting on both wood and metal.



PAINTS

**For every painting need
—indoors and out—see your
C-I-L PAINT DEALER**

For less disease
... more dollar returns



keep 'em growing right

with the right amount
of the right antibiotic
in good feeds every day

...the world's greatest disease-fighter:

AUREOMYCIN

CHLORTETRACYCLINE

The right amount each day
helps keep disease away!

Keep your pigs **HEALTHY** all through the growing period and continue to raise them at less cost per pound of gain! Give them good supplements containing the *right* amount of AUREOMYCIN.

During the growing period, your pigs can still be retarded by *visible* clinical diseases such as infectious enteritis and atrophic rhinitis. They can still be set back by *invisible* "sub-clinical" diseases. The power of AUREOMYCIN in suppressing a wide variety of harmful bacteria reduces your hog raising costs in three ways: (1) You *save* pigs. (2) You *save* feed. Pigs don't waste nutrient fighting disease — they use them to put on maximum gains. (3) You *save* time. Pigs get to market sooner.

The table below tells you the *right* amount of AUREOMYCIN your pigs should receive each day:

Weight of Pig	AUREOMYCIN Chlortetracycline your pigs should receive	AUREOMYCIN Chlortetracycline per ton of Complete Feed
Up to 35 lbs.	1.5 milligrams <i>daily</i> per pound of body weight	100 grams
35 lbs. to 75 lbs.	1.5 milligrams <i>daily</i> per pound of body weight (†Continue this level to market, if disease is observed in herd)	50 grams†
75 lbs. to market	0.5 milligram <i>daily</i> per pound of body weight	20 grams

Your feed manufacturer or feed mixer can supply you with feeds and supplements that meet these requirements. See him.

*Reg. U.S. Trade Mark



"Look for me! When I'm on a tag,
you know it's in the bag—

AUREOMYCIN"

CYANAMID

SOLD IN CANADA BY
N. D. HOGG, LTD.
BOX 66, STATION Q,
TORONTO, ONTARIO

MANUFACTURED BY
AMERICAN CYANAMID COMPANY
ANIMAL FEED DEPARTMENT

LIVESTOCK



[Vande Press photo]

U.S. studies in improved pasture have shown that it is cheaper for dairying than hay, corn or oats, and properly managed, it will give a good return.

Pasture Feeding Cheapest for Milk

AVERAGE yield of 2,440 pounds of total digestible nutrients (TDN) per acre of improved pasture was obtained last year by 100 grassland farmers in Wisconsin, according to a study made by the University of Wisconsin. This yield was equal to 2½ tons of high quality hay, 56 bushels of corn, or 110 bushels of oats, and the cost of producing a pound of TDN with these crops was higher than for the pasture—two cents per pound for hay, three cents per pound for corn and oats.

The average production cost per pound of TDN in improved pasture was one cent, when grazed for one year, but grazed two years in a row the cost was cut almost in half. A 1,200-pound cow could get all the nutrients needed for high milk production from one acre during a four-month pasture season. In some of the better pastures, each cow needed only half an acre for the entire summer.

By figuring the amount of milk each of the 100 farmers' herds produced from pasture nutrients alone, the University found that the average milk yield was 3,185 pounds of 3.5 per cent milk, or enough to fill about 40 ten-gallon milk cans from each acre. V

might be slightly lower than average because of an improvement in the performance of pigs resulting from the rations fed, or the use of inoculation against disease. If \$2 per pig would offset this tendency, the feed cost would become \$16 under average conditions, and the total cost of hog production, including 25 per cent for other costs, would be \$21.32 per pig.

A B₁ hog yielding a 150-pound carcass at \$19 per hundred pounds would be worth \$28.50, plus a premium of \$1. This represents a labor return of \$8.18 per pig, and under average conditions and present prices, is a reasonable return, say the Brandon specialists. V

Leptospirosis More Prevalent in Cattle

HERE is another disease for cattlemen to watch out for. Leptospirosis is its name, and Dr. Jim Henderson, of the Ontario Veterinary College, reports that from the time it was first identified in North America in 1944, in Connecticut, it has spread over much of the continent. In some parts of western Canada it has affected cattle, and during the past year, several cases were reported in the heavily populated cattle area north of Toronto.

It is a tricky disease to pin down, because symptoms vary greatly. Many cattle show no symptoms except a general unthriftiness and slight fever, while in acute cases, which sometimes result in death, there may be a bloody urine, anemia, and a characteristic thick milk, although without udder swelling, in cows. One symptom that has been noted with concern is abortion, which doesn't occur at peak of disease, but about ten days to three weeks after the peak of the attack in the herd. The abortion usually occurs in cows in the latter stages of pregnancy.

In western Canada, the disease has been identified in some cattle on feed. Diagnosis can be made through a blood test, for the animals remain blood reactors for some time after infection.

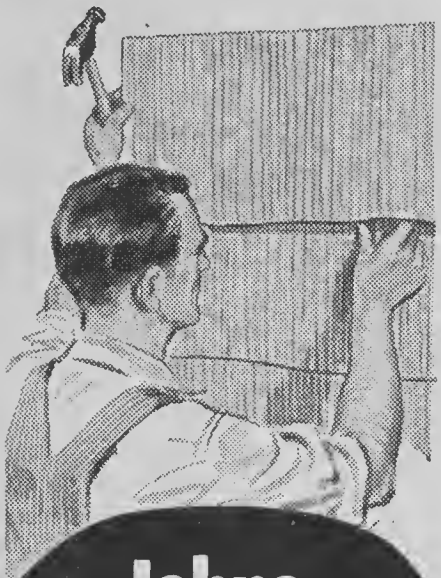
Leptospirosis can be spread by a carrier cow for at least three months after infection, or the organism, which likes to live in water, may remain around water holes on the range. The

Cost of Raising Hogs

FEED is the largest single cost item in hog production, and although the amount depends on good or bad management, it is usually estimated at 75 per cent of the total cost of production. Knowing the cost of feed, the total cost of production can be calculated for comparison with the market value of hogs, and the labor return from hogs can also be determined.

Based on recorded feed consumption of 398 pigs raised to market weight, the Brandon Experimental Farm, Manitoba, found that in 1955 the average feed required per pig was 35 pounds of creep feed, 239 pounds of growing ration, and 323 pounds of finishing ration. Based on this year's prices, the creep feed would be worth \$1.37, the growing ration \$5.88, and the finishing ration \$6.74, giving a total feed cost of \$13.99 per pig. This

Fire Protection at low cost!



**Johns-
Manville
Colorbestos
Sidewall
Shingles**

**Fireproof, rotproof ...
easy to apply ... never
need paint to preserve them**

The perfect siding for homes, barns and other buildings. J-M Colorbestos Shingles are made of asbestos and cement — fireproof, weather and wearproof. They're Silicone-Sealed to defy water and water-borne dirt. And best of all, they never need paint to preserve them. Attractive colors give beauty to new or old buildings! For folder write Canadian Johns-Manville, Port Credit, Ontario.

Now Available in Two Different Styles!

CEDARGRAIN DESIGN. These have the lovely appearance of weathered wood. Available in either straight or wavy butts and in the following colors—Pastel Green, Blue Gray, Dover White.

STRIATED DESIGN. Vertical, random-ribbed with straight butt lines. Colors available—Red, Green, Charcoal Gray.



B-1111

SEE THEM AT YOUR J-M DEALER

LIVESTOCK

worst abortion outbreaks have been in beef herds. Penicillin as a treatment has not proved too effective yet, but other antibiotics, used heavily, have stopped the carrier state of the disease. Usually, by the time of diagnosis, the damage has been done.

Bacterin is available and this will give immunity for about six months, but Dr. Henderson, explaining that this is not a new disease that is devastating the country's herds, but rather one that seems to be increasing in incidence, advises stockmen not to vaccinate unless they have the disease in their herds, and have identified the positive reactors to the blood test. V

Grain or Hay For Fattening Lambs?

FEEDING grain liberally to fatten lambs pays, provided that the cost of grain per ton is not much more than twice the cost of hay. Tests at the Lethbridge Experimental Farm, Alberta, were made with four groups of lambs. The first was fed one-half pound of grain to a pound of hay; the second had a pound of grain to a pound of hay, the third two pounds of grain to one of hay; and the fourth was fed hay and grain free choice.

The lambs fed free choice made the most rapid gains, and feed cost per 100 pounds was about the same as those fed equal parts of grain and hay. The most economical feeding was two pounds of grain to one pound of hay, costing around a dollar less per 100-pound gain than free choice, and almost two dollars less than one-half pound of grain to one pound of hay.

With feed costs calculated at \$20 per ton of hay, and \$40 per ton of grain, the actual 100-pound gain costs were: ½ lb. grain to 1 lb. hay, \$14.64; 1 lb. grain to 1 lb. hay, \$13.74; 2 lbs. grain to 1 lb. hay, \$12.70; grain and hay free choice, \$13.68. It can be seen that these comparisons depend largely on the relative costs of hay and grain on the farm. V

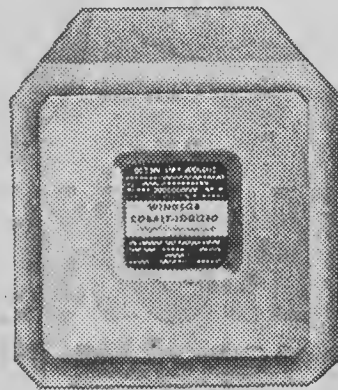
Dehorning Saves Dollars

CATTLEMEN can save thousands of dollars a year by removing horns from calves when they are a week or ten days old, according to C. E. Beveridge, livestock commissioner for Saskatchewan. A large number of carcasses, or parts of them, are condemned by meat inspectors on account of bruising, which is often the result of cattle fighting in the feedlot or during shipping. It has also been found that dehorned cattle are better feeders in the feedlot.

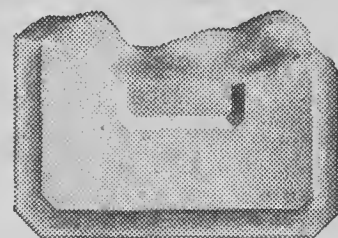
A caustic stick or caustic paste applied to the nub is the best method of dehorning. With the caustic stick, it is advisable to rub grease or Vaseline into the hair around the nub to prevent the caustic from hurting the skin and eyes. Caustic is not practical with calves born on the range, but the horns can be removed easily with a small gouger in the fall. Coal tar, smeared over the wound, prevents infection.

Older cattle can be dehorned at any time, either with a dehorner or saw. But the stubs continue to grow if the animal has not matured, and they look unsightly. V

New Windsor Salt stays IODIZED



TO THE



LAST LICK



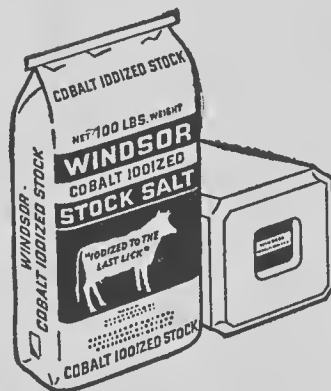
The Problem of IODINE LOSS in Farm Salt Has Been Beaten...

Here is valuable news for every farmer who cares about the health and thriftiness of his stock.

Canada Department of Agriculture chemists have developed a new iodine-carrying chemical (potassium iodate) that has remarkable stability under exposure to the elements. After many tests, it recently has been given official approval.

Now it is available to you, at *no extra cost* — in WINDSOR IODIZED, or COBALT-IODIZED SALT. You can order blocks, licks or stock salt and be certain they will *stay* iodized.

It's the easiest, cheapest way to give your stock regular quantities of iodine — *and* the important dietary factors, cobalt and salt.



WINDSOR

IODIZED and COBALT-IODIZED

SALT

"IODIZED TO THE LAST LICK"

THE CANADIAN SALT COMPANY LIMITED

WEEDS EAT PROFITS



for
OATS
and
FLAX
the
Swing
is to...

METHOXONE MCP Weed Killer

Tests show that, compared to 2,4-D...

—in Oats, METHOXONE increases yields 15 bus. per acre—cash increase at present prices \$13.00. On 160 acres total investment only \$70—EXTRA profit \$2,080.00.

—in Flax, METHOXONE can increase yields 8 to 10 bus. per acre. 5 bus. are common, cash increase at present prices \$21.00. On 160 acres, total investment only \$64—EXTRA profit \$3,360.00.

TREAT EARLY to get these Results!

Also excellent for killing weeds in early stages of Wheat and Barley. Effectively controls hard-to-kill weeds such as Hemp Nettle. Sodium, Amine and Ester formulations available.

Order from your local Dealer—NOW!

CHIPMAN CHEMICALS LIMITED

Winnipeg - Saskatoon - Edmonton - Montreal - Toronto - Hamilton

To Relieve Torturing ITCH OF ECZEMA

Try This Easy Way Tonight

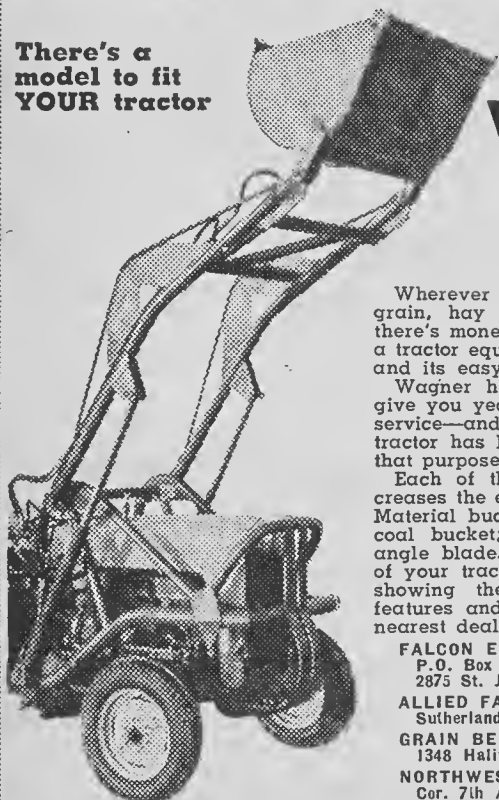
Stop in at your druggist and ask for a small original bottle of MOONE'S EMERALD OIL. Apply liberally at bed-time and get real relief in double-quick time. No matter what you may have tried, there's nothing quite like EMERALD OIL. Inexpensive and sold at all drug stores.

WHEN WE STARTED BREEDING LANDRACE SWINE

we purchased our foundation stock from the best breeders in England and Scotland. While the initial cost was high we know we have a foundation herd second to none. Before purchasing elsewhere send for descriptive folder and photos, or better still visit our farm. Weanling sows and boars, also serviceable boars for immediate delivery.

Fergus Landrace Swine Farm
Fergus Ontario

There's a
model to fit
YOUR tractor



**EVERY DAY
50,000
wagner
LOADERS
PILE UP MORE
DOLLARS!**

Wherever there's dirt, gravel, snow, or grain, hay and other crops to move—there's money to be saved and made with a tractor equipped with a WAGNER loader and its easy-to-change attachments.

Wagner hydraulic loaders are built to give you years of economical, dependable service—and the model built for YOUR tractor has been designed specifically for that purpose.

Each of these Wagner attachments increases the earning power of your tractor: Material buckets; manure fork; snow and coal bucket; fork lift; crane lift; 2-way angle blade. Write and tell us the make of your tractor—we'll send free literature showing the many exclusive WAGNER features and give you the name of your nearest dealer.

FALCON EQUIPMENT CO. LTD.
P.O. Box 40, Station H, Toronto 13, Ont.
2875 St. Joseph St., Lachine, P.Q.

ALLIED FARM EQUIPMENT LTD.
Sutherland Ave. at King, Winnipeg 4, Man.
GRAIN BELT FARM EQUIPMENT LTD.
1348 Halifax St., Regina, Sask.

NORTHWEST FARM EQUIPMENT LTD.
Cor. 7th Ave. and 6th St. E., Calgary, Alta.

FIELD



The tractor will have to work long hours during the next few months. Give it a chance to do the job economically and well by checking it thoroughly.

Keeping The Tractor Moving

TRACTORS are working long hours now, and it's important to get top performance from them. Clean the cooling system at least twice a year, says C. A. Cheshire, extension agricultural engineer with the Alberta Department of Agriculture. The scale can be removed generally with washing soda solution. Flush the radiator with clean water first, and then half fill it with soft water, making the remainder of it into a saturated solution by adding washing soda to it while it is boiling, until no more can be dissolved. Add this to the water already in the system, and run the tractor for 10 to 20 hours on farm work. Then drain the radiator, flush with clean water, and refill with soft water.

Also check the outside of the radiator for mud, insects and chaff, and keep it clean.

J. A. Peck, Saskatchewan Department of Agriculture, suggests a check of ignition points and spark plugs, and replacements if necessary. Poor plugs can waste as much as a gallon of gasoline in ten. Clean out fuel filters, and have the outlet from your permanent storage tank a few feet above the bottom of it, so you can prevent sediment from draining off into the fuel.

It is worthwhile to look over lubricating systems. Keep grease nipples unplugged, and look over the oil filter and oil bath air cleaner to make sure they are clean.

High-priced tractor tires last longer if they are at the right pressure, says S. L. Vogel, North Dakota Extension Service. Just a few pounds less than the recommended pressure will cause strains in the tire under heavy loads. If the pressure is too high, tires bruise easily. You can add a lot of weight above the normal tire load without increasing the tire pressure, if you keep your speed below ten miles an hour. A tire pressure gauge is a good investment.

Shefford Oats Popular

THE most important grain crop in Quebec, grown on about 1,400,000 acres, is oats. Shefford, a cross be-

tween Roxton and Mabel, and developed at Macdonald College, St. Anne de Bellevue, Que., is successful with many growers now. It was first distributed to growers in 1954 and is an early maturing, thin-hulled grain adapted particularly to Quebec and eastern Ontario.

Tests have shown it to be a heavier yielder than either Cartier or Mabel, two other oats. Shefford is rated as semi-resistant to lodging, although susceptible to stem rust.

Despite its stiffer straw, the Quebec Department of Agriculture warns growers where the soil fertility is out of balance, perhaps too rich in nitrogen, the grain is liable to lodge, anyway. Unfavorable weather that stimulates too much straw growth, or heavy storms when the crop is fully grown, but not yet ripened, also cause a great deal of loss from lodging. Care must be exercised in growing Shefford, as well as other varieties.

Irrigation In Eastern Provinces

DOES irrigation pay? Earlier this year, O. J. Wright of Conestoga reported his experiences with irrigation to the Ontario Soil and Crop Improvement Association, and expressed the opinion that the day is coming when irrigation will be a must for all sorts of cash and cultivated crops. He found that it paid good dividends in three of the past four years, and that it saved his potato crop last year.

When he started irrigating on June 24 last year, just after a hay crop had been taken off, the ground was gravelly and bone dry, and the stand was thin owing to a drought in 1954. Under those conditions, he says now, he should have applied more water than he did. It was noticeable that where the pipes bled, the stand was twice as high as in the rest of the field, which proved that there was a fair level of fertility. Owing to the hot weather, night irrigation was the only practical method, because there was too much evaporation during the day.

He tried varying lengths of run and got the best results from six hours, which moistened the bone-dry earth to

FIELD

a depth of about a foot. Alfalfa responded better than the grasses.

In spite of the shortcomings, Mr. Wright discovered last fall that the sod had thickened appreciably, in spite of a lot of late pasture due to rain. He thought this could be credited partly to irrigation.

Dr. D. C. MacKay, of the Kentville Experimental Farm, N.S., has been experimenting with sprinkler irrigation on sweet corn in sandy Maritime soils. He says there are two stages of growth which are most sensitive to moisture deficiency. The first is during tasseling and pollination, and the second when the ears are filling. Failure to provide irrigation, if needed, during these periods, may result in 50 per cent reduction in yield, and may seriously prevent proper filling of both ears and kernels.

Irrigation also increases the efficiency of applied fertilizers, according to Dr. MacKay. ✓

Getting At Corn Borers

WITH corn borers a growing menace in North America, it is good to hear that there is a new weapon to use against them. Wayne J. Colberg, North Dakota Extension Service entomologist, says that the use of granular insecticides was developed in the corn belt in co-operative research with the U.S. Department of Agriculture, and their use is recommended for corn borer control this year.

Granular insecticides are simply granular materials, such as tobacco stems and claylike materials, which are dosed with insect-killing materials. When applied to corn plants, these granules roll into the leaf whorls, where most of the corn borers attack the plant. Results with granular insecticides are said to be as good as, or better than, with the usual emulsion sprays. They are also easier to handle and leave less chemical residue on the plant. ✓

Don't Keep Quiet about Weeds

MANY weeds double their numbers many times each season, and it is better to eradicate the new ones when they are few, rather than wait until they are as plentiful as toadflax and a lot of others. Any strange or unknown plant may be a potential menace to agriculture and should be viewed with suspicion.

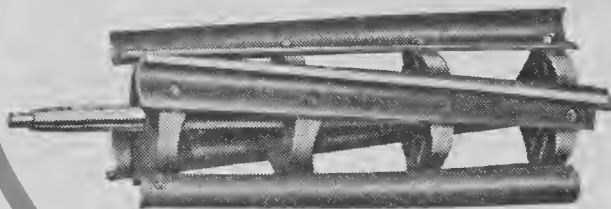
The Swift Current Experimental Farm, Saskatchewan, suggests that if you have any doubts, you should send a specimen, as complete as possible, to your nearest experimental farm for identification. They would rather identify dozens of harmless plants than allow one noxious one to spread unchecked.

A lot can be done with clean cultivation and the use of chemicals, but it is as well to know the enemy that has to be fought. So watch for new weeds, find out what they are, and then drive them out. ✓

Your way to better feed...lower cost!



HEART OF THE ALLIS-CHALMERS FORAGE HARVESTER



Exclusive cut-and-throw action
Full 3-foot cutting width
Stone-stopper safety clutch
Built-in knife sharpener

new HEAVY TONNAGE grass attachment

Low price . . . low upkeep . . . in a big-capacity forage-saving machine. Here is your assurance of the power to produce meat and milk at low cost.

The wide cut-and-throw cylinder made the Allis-Chalmers Forage Harvester a capacity leader. Now the leader is better than ever. The new direct-cut grass attachment is ruggedly built to harvest your crops day after day . . . year after year. For windrowed crops, the new *no-wrap* draper pickup is installed in minutes on the direct-cut attachment . . . without removing sickle or guards. For fall crops, easy-change SLIDE-LOCK attaching simplifies change-over from grass to row crop.

Now there's more capacity and dependability in the husky Allis-Chalmers Forage Harvester. You do more work at less cost . . . harvest more crops—grasses, legumes, row crops, hay, straw.

The Allis-Chalmers Forage and Grain Blower has These New Features

New clamp-ring pipe connectors make it easy to hook up pipe sections. New distributor hood gives positive control and delivery of material to barn mow, trenches, or stacks.

See your Allis-Chalmers dealer

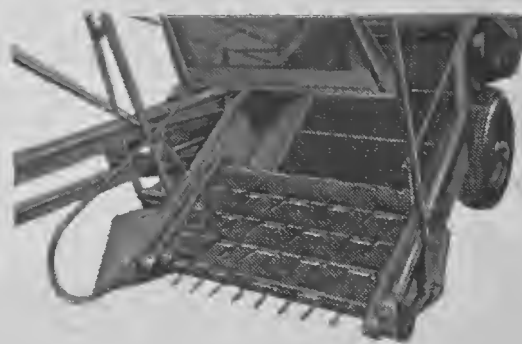
ALLIS-CHALMERS, FARM EQUIPMENT DIVISION
CALGARY • EDMONTON • REGINA • SASKATOON
TORONTO • WINNIPEG • MONTREAL

ALLIS-CHALMERS



8 NEW HEAVY-DUTY FEATURES

- New outer reel bearing
- Heavy-gauge steel on sides and bottom
- New welded subframe with x-trussing
- Double-strength sickle wear plate; reinforced and replaceable skid plates
- Sealed-for-life bearings on lower draper roller and idlers
- New shielding on draper sides
- New quick tension release for draper
- New rubberized draper with clipper lacing



Put more "GROW" in the growing season



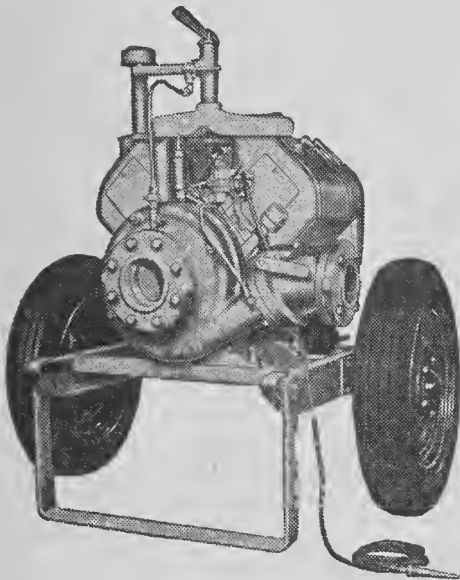
with MYERS



irrigation pumps

Bigger yields—up to 100% greater—and quality that demands top market prices are two important benefits of sprinkler irrigation. When water is added regularly, plant growth is continuous . . . preventing permanent growth loss due to short dry spells even when seasonal rainfall is normal.

Now is the time to plan for a Pressure Rain growing season. Compare these features of Myers irrigation pumps, then ask your Myers dealer to help you lay out a yield-boosting sprinkler system . . .



COMPLETE LINE with capacity ranges up to 1,800 gallons per minute, pressures to 200 pounds. Eight engine-driven models. Skid or wheel mounted. Three models for flexible coupling or belt drive.

ENGINES—Air and water cooled. Can be furnished to operate on LP fuel or natural gas.

SAFE DESIGN—Safety switches prevent damage due to loss of prime or overheating. Fuel pump and fuel line are supplied for use of large remote fuel tank. Eliminates fire hazard and frequent shutdowns for refueling.

MINIMUM UPKEEP REQUIRED—Continuous performance ratings obtained at 80% of engine throttle, assuring economical operation and long life.

QUALITY BUILT by Myers . . . the quality name in pumps and water systems for over 80 years.



WRITE TODAY FOR YOUR FREE COPY OF "RAIN ASSURANCE"...
MYERS POCKET GUIDE TO IRRIGATION METHODS AND EQUIPMENT

Myers

PUMPS

WATER SYSTEMS, SPRAYERS
AND WATER SOFTENERS
Foremost and Finest in the Field

Profitable Territories!

A few selected, profitable sales territories for Myers' new line of Pressure Rain irrigation pumps are now available. Write today to: The F. E. Myers & Bro. Co. (Canada) Ltd., Kitchener, Ontario.



**MEN
PAST
40**

Troubled with **GETTING UP NIGHTS, Pains in BACK, HIPS, LEGS, Tiredness, Loss of Physical Vigor**

If you have these symptoms then your troubles may be traced to Glandular Dysfunction . . . a constitutional disease. Medicines that give temporary relief will not remove the cause of your trouble. Neglect of Glandular Dysfunction often leads to premature old age and sometimes incurable malignancy.

The past few years men from over 3,000 communities have been successfully treated here at the Excelsior Institute. They have found soothing relief and new zest in life.

The Excelsior Institute, devoted to the treatment of diseases peculiar to older men by NON-SURGICAL methods has a NEW FREE BOOK that tells how Glandular Dysfunction may be corrected by proven NON-SURGICAL treatments. This book may prove of utmost importance in your life. Write today. There is no obligation. Excelsior Institute, Dept. A-134, Excelsior Springs, Mo.

HORTICULTURE



[Bob Taylor photo]

Now, with the blossoms, is spring come to the world again with the wonders of fertility, the fragile beauty of blossoms, and the busyness of insects.

New

Cucumbers

THE experimental farm at Morden, Manitoba, announces two new varieties of cucumbers, both of which will probably be listed by commercial seed firms in 1957.

The first is Morcrop, the result of crossing two especially selected strains of other varieties. It is reported suitable for gherkin, ring and dill types of pickles during early development, and for slicing when full sized. Its yield is excellent, producing its additional yield in the first half of the harvesting season. Vines average 4.5 feet and fruits eight to nine inches in length and 2.4 inches in cross-section. Quality is excellent, with small seed cavity.

Morden Early is a selection from a Norwegian variety developed especially for northern gardens and primarily for pickling. It begins to flower before standard varieties start to vine out, and the fruits are small, averaging 4.2 inches in length and 2.5 inches in cross-section, yellowing quickly after full size.

time for effective control, and indicate what remedy to apply.

Fertilizers for Tomato Profits

COMMERCIAL tomato growers must obtain relatively high yields to secure profitable crops. In many cases today, this makes necessary a fairly liberal use of commercial fertilizers.

The kind and amounts of fertilizers will depend primarily on the fertility of the soil itself, and to some extent on the general cultural methods employed.

The Summerland Experimental Farm reports that many B.C. tomato growers have been securing relatively low yields due to lack of sufficient fertilizer. In that area, up to 120 pounds of actual nitrogen per acre has not reduced the canning quality of tomatoes, while up to 300 pounds of phosphate fertilizer (P_2O_5) per acre benefited tomato canning quality. On the other hand, potash fertilizers in that area failed to improve canning quality and may, in fact, have reduced it for some growers.

Insect Control

THIS is the season of the year when it would be wise to find out in advance something about the way to recognize the insects and diseases which appear on fruit, vegetables and flowers during the spring and summer months, and what to do about each of them.

In nearly every province, bulletins or leaflets are available which should be kept ready to hand, for reference when the first plant enemy appears and seems to threaten to take the joy out of life. In some cases the information may be available in bulletins, which will describe in more or less detail the symptoms of the presence of the particular insect or disease, and the type of injury caused by it, as well as the remedy. For convenience, as, for example, in Manitoba, handy reference sheets in tabular form can be secured, which list the insects attacking the various fruits, and for each one describe the injurious stages and types of injury, summarize the life history of the insect, suggest the best

Home Gardening

THE commercial importance of home gardening is estimated at 1.5 billion dollars annually, at retail prices, in the United States, with the prediction that it may total nearly \$3 billion within three years.

Approximately 30 million U.S. home gardeners buy \$660 million worth of nursery stock each year. They seed about nine million pounds of grass seed for new homes only. About five times as much is applied on old lawns, while grass seed for all purposes runs to about 75 million pounds.

About 30 million American families grow flowers and about 13 million grow vegetables. Flower seed production runs to about \$50 million a year, and grass, flower and vegetable seed combined costs about \$300 million. Home gardeners also use about 305,000 tons of fertilizers and spend \$35 million on flower bulbs, and about \$300 million at hardware stores for lawn, garden and outdoor living equipment.

NOW—you can take your choice of Canada's finest

V-8 or SIX

For the first time in Canada, Ford Trucks offer you the famous 133-Hp. I-block Cost Cutter Six as well as the traditionally finer 167-Hp. Power King V-8 in all models from F-100 Pickup to F-500. Both engines feature economical short-stroke power!

Great news for any farmer who uses a light-duty or medium-duty truck for any type of farm hauling job! Ford Trucks now offer Canada's newest Six as well as the finest of V-8's—both of them embodying the industry's greatest line-up of engineering advancements—both of them bringing you the performance and gas-saving advantages of *modern short-stroke power*! You get more usable power per dollar, more power from every gallon of gas . . . lower costs every mile you drive!

You get plenty of other extra-value features in Ford Trucks, too! You get Ford-pioneered Life-guard Design, with safety steering wheel and safety-hold door latches as built-in features, plus new nylon seat belts and plastic padding for instrument panel and sun visors as low-cost options. You get increased capacities that mean more payload per trip. And Ford Trucks are ruggedly built, with extra-strong frames to give you finer service, on the road and on the farm!



F-500 Grain Body

Farmers get **MORE OF EVERYTHING**

in

FORD TRUCKS

triple
economy



SEE YOUR FORD-MONARCH DEALER



use GILLETT'S LYE

To banish the heaviest, greasiest dirt, scrub or wash with a solution of 2 tablespoons of Gillett's Lye to a gallon of water. Gillett's actually attacks grease and dirt, gets it out of cracks and crannies where ordinary cleansers fail. In addition, Gillett's reacts *chemically* with all forms of fat or grease to form a soap solution. Result: surfaces come up spotlessly clean and *sanitary*. Yes, Gillett's sanitizes on contact! *No other product — even at several times the price — can help with your heavy cleaning like low-cost Gillett's!*



OUTHOUSE SANITATION

No need for outhouse cleaning to be an unpleasant job! Simply sprinkle in half a regular-size can of Gillett's each week. It helps keep flies away, destroy contents and odors. Takes only a few seconds, costs only a few cents.

GL-78A

IN REGULAR SIZE AND MONEY-SAVING 5LB. CANS.

Alberta's Largest Hatchery

STEWART'S R.O.P. SIRED CHICKS

Turkey Poults - Ducklings - Goslings
BARGAIN PRICES

For Immediate or Future Delivery
May 10th to July 6th

ALL CANADIAN R.O.P. SIRED CHICKS

	Unsexed 100	Pullets 100
White Leghorns	12.95	31.90
New Hampshires	14.95	25.90
Barred Rocks	14.95	25.90
Light Sussex	14.95	25.90
White Rocks	14.95	25.90
Black Australorps	15.95	25.90
Leghorn X Hampshire	12.95	31.90
Leghorn X White Rock	12.95	31.90
Leghorn X Barred Rock	12.95	31.90
Hampshire X Sussex	14.95	25.90
Hampshire X Barred Rock	14.95	25.90
White Rock X Hampshire	14.95	25.90

On orders less than 100 add 1c PER CHICK

COCKEREL CHICKS	100	50	25
White Leghorns	3.00	2.00	1.00
Leghorn X Hampshire	7.50	4.25	2.15
Heavy Breed Cockerels	14.95	7.95	3.95

	100	50	25	10
Ducklings	45.00	23.00	12.00	5.00
Toulouse Goslings	160.00	82.50	42.50	17.50

Broad-Breasted Bronze Turkey Poults—Competitive Prices.
IMMEDIATE DELIVERY
Day-old and Started Chicks, Turkey Poults, Ducklings and Goslings.

STEWART ELECTRIC HATCHERIES

602C—12th Avenue West, CALGARY, ALBERTA

The demand for TWEDDLE CHICKS

is increasing due to the fact that we are supplying our customers with some of the best strains and breeds for egg production; for broilers and breeds of turkeys. Sure it costs us a lot of money to purchase the foundation stock each year from some of the best breeders in America, but it has paid off, not only for our customers but for us with increased business. Send for 1956 catalogue giving full details about our special egg breeds, broiler breeds and turkey poults.

Tweddle Chick Hatcheries Limited
FERGUS ONTARIO



If you keep layers for profit, let Hy-Lines show you greater profits. Hy-Lines are hybrid-bred for greater efficiency, heavier production, less culling. Write now for full information.

BRETT-YOUNG SEEDS LTD.
Winnipeg 13

MAGNETO & DIESEL INJECTOR REPAIRS
Don't let diesel injector, magneto, generator or starter repairs delay your tractor work. Let us do your repairs. We offer the fastest service, all work guaranteed. We are authorized service stations for American Bosch, Elseman and Wico, Fairbanks Morse magnetos. Send replies direct to:

BROWN & MURRAY LIMITED
237 Fort Street Winnipeg 1, Manitoba

POULTRY



[Eva Luoma photo]

Poultry production on the modern scale demands good housing and equipment, and proper feeding, if the unit cost is to be kept at a profitable level.

Eggs from Broiler Strains

THE egg production possibilities of dual-purpose and broiler strains have been investigated at the Fred-erickton Experimental Farm, N.B., where egg records for a well-known broiler strain of New Hampshires were compared with those of a dual-purpose strain of Barred Rocks. The conclusion was that commercial egg production from a broiler strain of pullets is not likely to be profitable unless a market is available at a broiler hatchery for a large proportion of the eggs.

On a survivor basis, the Barred Rocks laid 21 more eggs per bird than the broiler strain up to 336 days of age, and 36 eggs more up to 500 days. Feed conversion figures were not available, but it was known that the larger broiler strain required more feed for maintenance than the smaller birds. Tests in the United States have shown that it requires, on the average, over eight pounds of feed to produce a dozen eggs from broiler strains, while dual-purpose and egg strains need six pounds of feed or less to produce a dozen eggs.

The higher market value of the broiler carcass at the end of the laying period would cover only part of the higher cost of rearing and maintenance.

Keeping Up with Poultry Improvements

THE future of the poultry industry is bright, according to J. H. Downs of the Lethbridge Experimental Farm, Alta. He points out that new knowledge in poultry breeding, feeding, housing and management has resulted in amazing progress during the past ten years, and Canadians are now consuming over 26 pounds of poultry meat and 260 eggs per capita each year.

One striking change has been from the hen with a small brood of chicks to the modern broiler plant with thousands of chicks in one room. Meat production is no longer a by-product of the egg business, and poultrymen today buy a strain, a strain cross or a

crossbred chick which has been developed to produce eggs or meat, but not both. They buy now on the reputation of the trade or breeder's name in much the same way as they buy other things carrying the manufacturer's name or trade-mark. One result is that through improvements in breeding methods, and a greater knowledge of nutrition, it is possible to produce a three-pound broiler in from eight to ten weeks.

However, as in other fields, progress has introduced new problems. Narrowing profit margins are forcing poultrymen to become more efficient, and larger flocks are becoming essential, but these pose new problems in the control of disease. The unit cost of production can be cut by using larger and more efficient buildings and equipment, and by making full use of these with a run through of at least four hatches a year.

Is the poultryman of today committed to higher costs and diminishing returns, without hope of making a reasonable living out of it? Not if he keeps abreast of new developments through universities, departments of agriculture and experimental farms. V

Coccidiosis In Young Chicks

COCCIDIOSIS may be found in chicks when they are five to six weeks old, although it is more common when they are a little older. Damp surroundings, along with warm or hot weather, are ideal for an outbreak, which can be detected by droopy appearance, ruffled feathers, loss of weight, and often blood in the droppings.

Sodium salts of any of the sulpha drugs can be used as treatment, according to the Department of Poultry Husbandry, University of Saskatchewan. These drugs are soluble in water, and should be mixed with the drinking water according to the directions. Success depends on early diagnosis and following the treatment. There are now medicated starters available from feed dealers, and if the instructions are followed, the disease should not be a problem in the growing stock. V

Does
"Doing-it-
Yourself"
give you

sore
aching
muscles?

Here's relief—fast!

● Smart trick for problem ceilings: paper them! And if your muscles ache afterwards, it's smart to rub on Absorbine Jr.

Absorbine Jr. has been a standby for many trainers of top athletes for over 60 years. "Like a heat lamp in a bottle," it warms and soothes—gives safe, fast, long-lasting relief from pain at the point of application.

You can buy Absorbine Jr. wherever drugs are sold.

W. F. Young, Inc., Montreal 19, P. Q.

ABSORBINE JR.

No Power Take-off

Jayhawk

MOBILE WEDGE TRUCK HOIST



Works With Any Transmission
With Motor On or Off



Costs Less...Mounts Easier, Cheaper

Get a Jayhawk and you've got a lift for life...because it's entirely independent of truck motor or transmission, operates on 6 or 12 volt systems, can be moved easily from truck to truck.

Completely electric-hydraulic... Dual push button operation...simplified, more efficient mobile wedge lifting principle. These features save you money... on first cost, mounting cost, annual cost. Models for both pickups and large trucks... at Jayhawk dealers. For FREE CIRCULAR, write direct... today.

WYATT MFG. CO., INC.

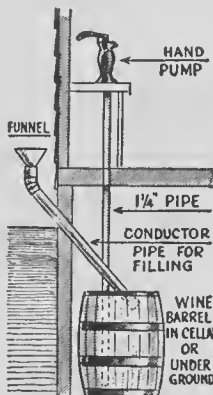
Since 1903 Dept. H-114 Salina, Kansas

Distributed in Canada by
McKENZIE AUTO EQUIPT., LTD.
Regina, Moose Jaw, Saskatoon, North Battleford, Yorkton
T. H. PEACOCK, LTD.
Calgary, Lethbridge, Edmonton
EQUIPMENT DISTRIBUTORS, LTD., Winnipeg

WORKSHOP

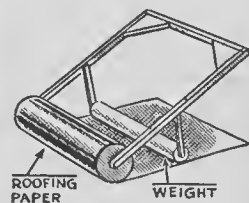
Handy Ideas For the Farmer

Water System. People who have to haul their water some distance will probably welcome this labor-saving idea. Get a 65-gallon wine barrel, listed by liquor boards at \$3.50; a custom pump that drains when you raise the handle, about \$6; 10 feet of 1 1/4-inch pipe, about \$5; and 10 feet of eaves trough conductor, \$2. Put the barrel in the basement or dig a hole, eight



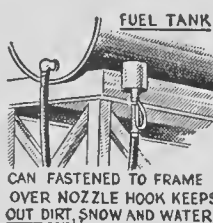
feet or more deep, close to the house, then put the barrel into it, and bank it up well with earth to keep out the frost. Set the pump in a handy place above the barrel, and attach the pipe so it will drain when the pump handle is raised. Use the eaves spout for carrying water to the barrel, attaching a large funnel to the upper end of it. You now have a water system that saves you running out for each pail of water, and it costs less than \$20. I use one barrel between my pump and storage tank, and if it is pumped full of fresh water every day, it will not freeze so long as it is covered with paper on the sides and a blanket over the top. It also keeps water cool in summer.—E.L., Alta. ✓

Roofing Roller. For applying roof paper, make a frame to fit the roll of paper, allowing enough room for the paper to unroll smoothly. But there should be enough tension to prevent the paper from wrinkling. The man with the tar can works just ahead of the man with the roller. A weight can be suspended from the frame to make a better job of keeping tension on the paper.—S.S.B., Sask. ✓

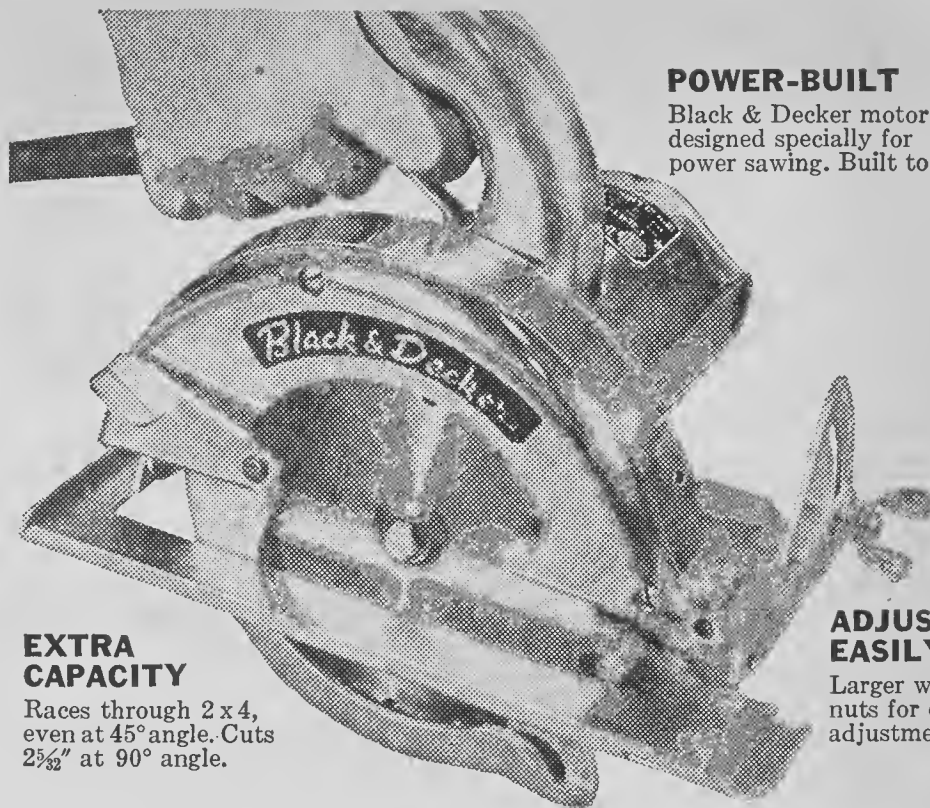


Drilling Metal. If you have no drill press, try this idea for drilling holes in metal or slippery plastic. Place a small piece of cellulose tape over the spot that is to be drilled, and this will give the drill point a better start, and will prevent burring and scratching.—M.W.W., Man. ✓

Nozzle Cover. Use an old tin can to cover your fuel nozzle and protect it from dirt, water and snow. This simple, but effective idea, can save you a lot of inconvenience. The empty can, turned upside down, should be secured to your fuel stand just above the hook for the nozzle.—G.M.E., Alta. ✓



Plugged Drains. When drains and pipes are plugged, pour a solution of tri-sodium and boiling water down the sink. This will usually cut through the plugged spots. Do not pour washing soda down the sink, because most



POWER-BUILT

Black & Decker motor designed specially for power sawing. Built to last.

EXTRA CAPACITY

Races through 2 x 4, even at 45° angle. Cuts 2 3/8" at 90° angle.

ADJUSTS EASILY

Larger wing nuts for easy adjustments.

Latest addition to B&D's Power Saw Line-up!

BLACK & DECKER 6 1/2" HEAVY-DUTY SAW

Here's the one saw for every professional cut! Depended upon by carpenters and builders—yet so simple to operate, anyone can use it. Packed with power, B&D's new 6 1/2" Heavy-Duty Saw cuts through practically any building material with ease. Black & Decker 6 1/2" Heavy-Duty Saw. **\$79.50**

There's a Full Line of Black & Decker Power-Built Saws for every type of job.

6" HEAVY-DUTY SAW

Cuts any depth up to 2", in practically every known building material. Beveling, cutting-depth adjustments. **\$73.50**

7" HEAVY-DUTY SAW

Holds bevel cuts accurate at any angle from 90° to 45°. Front and rear depth cutting adjustments. **\$106.50**

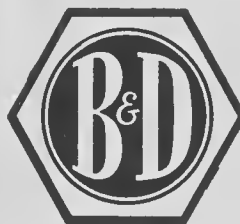
8" HEAVY-DUTY SAW

Ideal for contractor who wants one unit for all types of cutting. Ample power for any cutting depth. **\$120.50**

9" HEAVY-DUTY SAW

Designed and powered for heaviest cutting of any material. Maximum depth 3 1/4". Adjusts to any angle from 90° to 45°. **\$143.50**

Full selection of B&D KROBIDE Blades and Saw Accessories for Every Job



Black & Decker®

PORTABLE ELECTRIC TOOLS

Buy these sensational tools at your Black & Decker Dealer

19-6

Aluminum or Galvanized

ROOFING

Corrugated and ribbed for both Roofing and Siding. Sheet 5 to 24 ft. lengths; 36" cover, 32" wide, 24 gauge. Send roof measurements for free estimate and illustrated folder giving full information. Samples on request. Immediate delivery from stock.

ANT. GONNEVILLE
Dept. 3, Charette, Que.

Get Quick Relief from CHRONIC BRONCHITIS

"Ever since birth, I was subject to attacks of Chronic Bronchitis," writes Mr. Roy Jarvis, 1026 Dovercourt Rd., Toronto. "I coughed violently and wheezed a great deal. Then I learned about RAZ-MAH—and now I'm happy to say I've found relief."

You, too, can get quick relief from that dry, hacking or phlegmy bronchial cough. Take Templeton's RAZ-MAH—the remedy specially made to relieve Chronic Bronchitis, Asthma and Hay Fever. Enjoy your work, enjoy your rest—start taking RAZ-MAH today. 79c and \$1.50 at druggists. R5-4

Do FALSE TEETH Rock, Slide or Slip?

FASTEETH, an improved powder to be sprinkled on upper or lower plates, holds false teeth more firmly in place. Do not slide, slip or rock. No gummy, gooey, pasty taste or feeling. FASTEETH is alkaline (non-acid). Does not sour. Checks "plate odor" (denture breath). Get FASTEETH at any drug counter.

one of these **3**

Esso fuels

is right for

your tractor

ESSO TRACTOR

GASOLINE*... designed to develop smooth, low-cost power in farm tractors, combines and other farm engines... clean burning, dependable power under all load conditions.

*Available in Alberta, Saskatchewan and Manitoba

ESSO GASOLINE... designed for top performance in *high compression* tractor engines. Its high quality gives you easy starting and peak operating power.

ESSO DIESEL FUEL... specially designed to provide quick, sure starts and smooth, low-cost power in diesel tractors.

For prompt delivery of all your farm gasoline, oil and grease needs... call your IMPERIAL OIL agent.



ALWAYS LOOK TO IMPERIAL FOR THE BEST

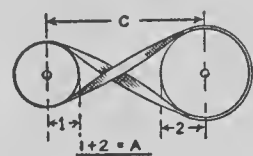


WORKSHOP

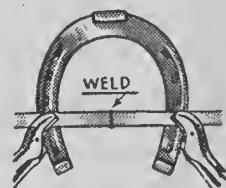
water contains some lime, and when the soda solution mixes with the lime, it forms a thick, sluggish substance that will surely plug the drain.—H.S., Mich. ✓

Thermos Protector. To prevent a thermos bottle from breaking while it is being knocked about on a tractor or combine, wrap it in corrugated cardboard, which takes up the shock.—E.O., Alta. ✓

Length of Crossed Belt. The length of a crossed belt can be calculated as follows: Add the radius of the large pulley (in inches) to the radius of the small pulley, and call the sum A. Square A and call the result B. Let the distance between the centers of the shafts be called C, and square C, calling the result D. Multiply A by 3.1416, and call the result E. Multiply B by two and divide the result by C, calling this F. Subtract B from D, take the square root of the difference, and multiply the square root by two, and call the result G. Add E, F, and G, and the result will be the length of the belt in inches.—W.F.S., N.J. ✓



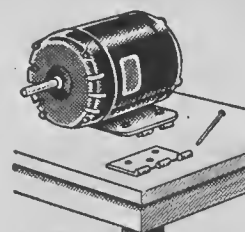
Welding Hint. Holding pieces of iron steady while you weld them together can be quite a problem, but not if you use this method. All you need is a horseshoe and a couple of vise grips, and then secure the metal to the shoe with the grips, as shown. I have found this very effective.—J.J.E., Alta. ✓



WISE GRIPS AND HORSE SHOE HOLD STRIPS FOR WELDING

Paint Crust. To prevent left-over paint from crusting on top, I pour melted paraffin wax on the remainder in the can. The paraffin will solidify and lift off easily when the paint is needed again.—J.W.W., Man. ✓

Securing Electric Motor. Most farms have one small motor to run several machines, such as a pump, grinder or saw. It is useful to fasten the motor down to prevent it jumping around, but it must be possible to move it from one job to another. Weld, bolt or screw to the base of the motor a hinge from which the pin can be removed, and fasten the other side of the hinge to the machine in use. Fasten another hinge to another machine, and remove half of it, so that the motor can be changed quickly to this machine and secured by joining the two half-hinges with the pin. This can be repeated wherever the motor is needed on the farm.—S.B., Sask.



BOLT HALF OF HINGE TO MOTOR BASE - OTHER HALF TO TABLE

Cord Holders. Coat hooks, nailed to the walls or ceiling of a barn or hoghouse, make handy holders when electrical extension cords are needed. I find this especially useful at farrowing time.—J.W.W., Man. ✓

RIGHT FILES
make handsaw
sharpening
EASY

NUMBER OF SAW POINTS PER INCH	USE
5	6" Slim Taper or 7" Extra Slim Taper
6	6" Slim Taper or 7" Extra Slim Taper
7	6" Slim Taper or 6" Extra Slim Taper
8	6" Slim Taper or 6" Extra Slim Taper or 8" Double Extra Slim Taper
9	6" Extra Slim Taper or 7" Double Extra Slim Taper
10	5" Extra Slim Taper or 6" Double Extra Slim Taper

When you pick the right file for your saw's number of points (teeth) per inch, you'll find that saw sharpening is quicker and slicker—and saws cut wood in much less time. Just be sure you select long-lasting Black Diamonds. They more than repay you in satisfaction. At good hardware stores everywhere.

Write for "Files for the Farm," 48 information-packed pages. **FREE.**

NICHOLSON FILE COMPANY
OF CANADA LTD.
Part Hape, Ontario

BLACK
DIAMOND
FILES

FOR EVERY PURPOSE
Made in Canada for more than 50 years

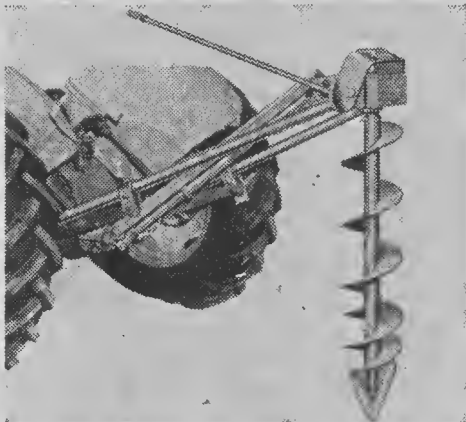
WHAT'S NEW



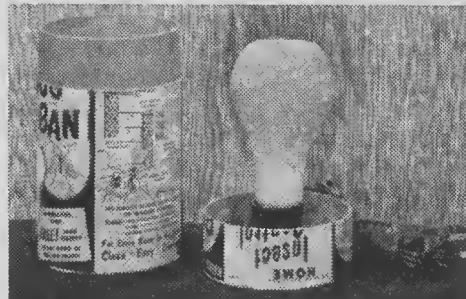
This tilt-bed, trailer-type unit is for moving haystacks from the field to the feedlot, loading and unloading them with cables and winch operated from tractor PTO. With capacity rated at eight tons, the makers say it handles stacks 16 by 24 feet, or round stacks up to 20 feet diameter. (The Farm-hand Company.) (122) ✓



A concentrated fertilizer for turf and ornamental plants, "Uramite" is said to combine a high nitrogen content (38 per cent) with a prolonged release rate to conform to soil moisture and temperature. (Du Pont Company of Canada.) (123) ✓

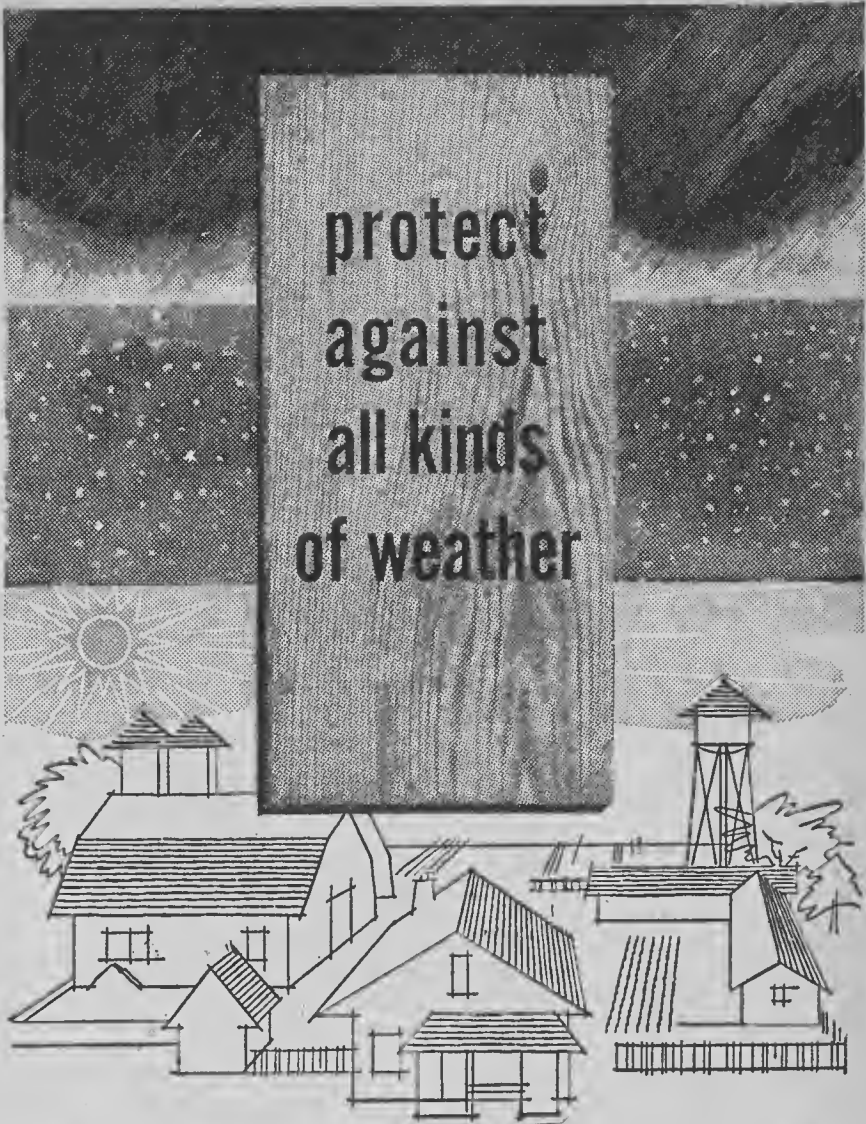


With its spade-type point and wedging action, this post hole digger cuts through any ground except hard rock and stone, and scours itself as it digs, according to the manufacturer. (Ottawa-Warner Corporation.) (124) ✓



For killing insects indoors, this kit operates by dropping tablets into the cupped top of the electric vaporizer bulb. It is claimed to be clean, odorless and fast working. (Verd-A-Ray Products Ltd.) (125) ✓

For further information about any item mentioned in this column, write to What's New Department, The Country Guide, 290 Vaughan St., Winnipeg 2, giving the key number shown at the end of each item, as—(17).



ECONOMY GRADE RED CEDAR SHINGLES

DO THE JOB BEST / COST LESS



Fair weather or foul, only genuine cedar shingles give the protection, the long life, and the natural insulation your farm buildings need. And, in the economy grades, real cedar remains the one best buy in a quality building material! Your lumber dealer has the right grade for the roof or wall construction you may be planning. See him soon—and, now, send for free folders showing all the ways good-looking, long-lasting cedar shingles can help make your farm building more attractive, more weather-tight, more profitable.



FREE! SEND COUPON
FOR THESE THREE
HELPFUL BOOKLETS!

RED CEDAR SHINGLE BUREAU
550 Burrard Street, Vancouver 1, B. C.

Gentlemen: Please send my copies of the booklets "Roof and Wall Shingling Made Easy," "Genuine Red Cedar Shingle Roofs and Walls," and "Certigrade Handbook of Red Cedar Shingles."

NAME _____

ADDRESS _____

TOWN _____ PROV. _____

THE ONE-MAN HARVESTER



The only machine that loads in the field and unloads at the barn.

You Won't Need
Extra Help
If You Have A

McKEE Shredder Harvester

YOU need a machine like THIS!

Here's why: It doesn't need extra men—one man can load the equivalent of 70 bales of hay in 12 minutes, and unload in about the same time with no extra help, using the same machine. It doesn't use expensive twine. It doesn't tie hay in bundles and leave it in the field to be picked up later by hand.

More than a hay machine—you can fill that silo with grass silage, or pick up and store soft moisture-absorbent straw. A shredder, not a chopper—no aprons, chains or gears to wear out.

McKEE BROS. LIMITED, Dept. C
Elmira, Ontario

Please send me additional information on:

- ☐ Descriptive Catalogue of the One-Man Harvesting System
☐ Name of your nearest Distributor

NAME _____

ADDRESS _____

I own _____ acres.

"BEFORE YOU INVEST, INVESTIGATE"

McKEE BROS. LIMITED

ELMIRA

ONTARIO

Young People

On the farm and at home



Ethel Fritz, 4-H Saskatchewan member.

My Career In 4-H

DELEGATES to the Canadian Council on 4-H Clubs at Saskatoon were interested in the talk given by Ethel Fritz, third year home economics student, University of Saskatchewan. Her home is on a farm at Shaunavon and this summer she will work on the extension staff of the university. A summary of Ethel's talk "My Career in 4-H" follows:

In September 1945 when the Shaunavon Baby Beef Club was formed there were three small girls in attendance with their father. It was the first time I could remember being in town on a Saturday afternoon—it was a real experience!

When I asked Dad why he had us join he said, "To further your education and interest you in farming, particularly in raising good cattle." All I remember of the first three years of 4-H work were meetings on Saturday afternoons in the town hall, achievement days, demonstrations, guest speakers and the championship calf owned by the Fritz family.

In 1948 club members invested in yellow shirts, brown slacks and crests for uniforms. My parents co-operated in this as they have throughout my club career. That year the regional competition was held at our farm and our club acted as host—an education in itself.

In 1949 Dad and his three girls won the high-point trophy and \$25 for our club in the Junior Competitions at Swift Current Fair. That fall I became secretary of the club and held office for two years, after which I became president of the newly formed Homecraft Club. In this way I learned the procedure of conducting meetings, writing minutes and making arrangements for club meetings and activities. From this I gained the ability and confidence to speak in public.

The 4-H Homecraft Club gave me a trip to Saskatoon for Girls' Club

Weck. It was on this trip that I fell in love with the university campus and decided to take the home economics course.

Through the International Club exchanges which are held annually between Blaine County, Montana, and the Eastend district, I was able to learn about American clubs from American friends.

Good sportsmanship is another quality I gained through 4-H work. I'll never forget when my sister, four years younger, won first prize for her embroidery work at Achievement Day!

In our home, 4-H work has always been a family undertaking. It has served to give us all an interest in better farming methods, and in what others are doing. There have always been at least two of our family in the club—this year there are three. When my brother comes of club age, he will be a 4-H member too. Dad certainly interested us in farming—we are all farmers at heart.

In everyone's life there must be stepping stones to show him the way to his goal. My experiences as a 4-H member have been important in helping me find mine. Without 4-H I probably would not be attending university now. From 4-H projects I had enough money to take me through the first two years unassisted. My experience as a 4-H'er should help me in my summer position on extension work. The self-confidence, good sportsmanship, ability to accept responsibility, the knowledge and leadership training I received through 4-H will be of help to me in the future as it has been in the past.

Gathering a News Story

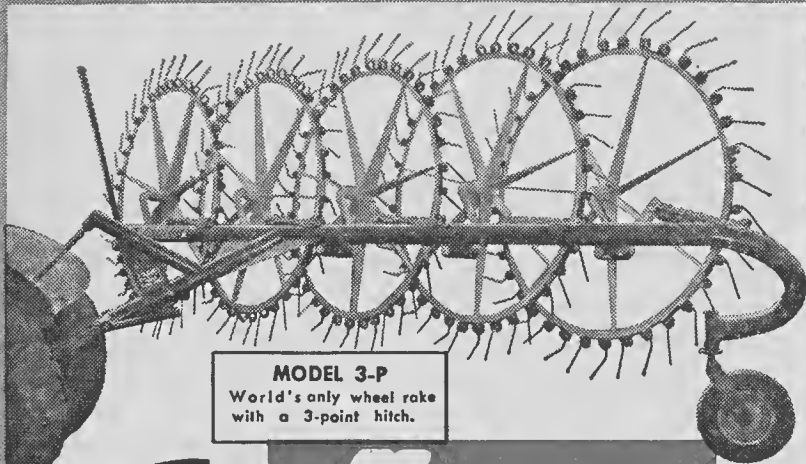
THE editor of the school paper has given you an assignment. You are to go out and find the material for a feature article and write it for the next issue of the paper.

If there is something unusual going on in your district such as a fair, ball tournament, concert or golden wedding, your story is there for the asking. Perhaps some official or person of note is visiting your town—a member of parliament, school inspector, agricultural representative, the head of a business organization or district home economist. You could interview one of them and get a worthwhile story about his work.

However, stories are not always that easy to find; you may have to look farther afield. Why not interview an old-timer in your district? He has a wealth of stories of the early days if you take the time and trouble to visit and talk with him.

Before setting out for the interview decide what you are looking for—do you want the story of early farming days, the history of the school and church, how the town was built up, or a description of some past event? Write out a number of questions you would like to ask but don't insist on

BEST HAY RAKE YET!



MODEL 3-P

World's only wheel rake with a 3-point hitch.

MORRILL HAY MASTER

for '56

... costs less to own
... less to maintain

Spectacular performance saves your time and money! Don't rake anything this year till you've seen the Hay Master's new features—cleaner streamlining ... fingertip balance ... added toughness ... gearless, gadget-free action. Automatically rakes anything you can mow.

It's a Marvel ...
All-New & Automatic!

MODEL M

Trailer-type raking —
smoother than ever!

MODEL LR

Rakes in adjustable 4 - 8
ft. swaths.

See your Morrill Dealer
or write:

In ALBERTA
Calgary Farm Machinery
P.O. Box 117
Calgary, Alberta

In BRITISH COLUMBIA
Pacific Tractor & Equipment
503 Railway Street
Vancouver, B.C.

In SASKATCHEWAN
Kern Farm Equipment
6th & Hamilton Street
Regina, Saskatchewan

In MANITOBA
Equipment Distributors
125 Garry Street
Winnipeg 1, Manitoba

West Coast Sales & Service Co.

202 NORTH J STREET
TULARE, CALIFORNIA

YOUNG PEOPLE

getting answers to all of them. It could happen that the old-timer has a much more interesting story up his sleeve. Give him a chance to tell it.

Ask questions to start him talking. "How did this town look when you came here? Where did you go for food supplies in the early days? How did you put in your first crop?" Any one of these may start him off on a good story. As he talks jot down notes, especially on dates and places he mentions, for your story must be accurate. Keep the old-timer talking by asking further questions along the lines of the story you want. Don't hurry, give him time to recall the past—the personal incidents he relates will color your story with warm, human interest.

When you have the material and have thanked him for the interview, you are ready to begin writing. You must now decide on the particular point or angle around which you are going to develop the story. Let's say you decide to tell a story of early farming days in the district, using the experiences of the old-timer interviewed. Details related to this topic such as: how he broke his land, the machinery used to sow and reap his grain, where he sold his produce and price received, how he got supplies, his successes and failures, and how the neighbors worked and played together, all become part of the story. Other material which does not relate to this central idea should not be used.

Start the story off with interesting sentences that will make your reader want to continue. Observe the five "W's of news writing: who; where; when; what, and why." By answering these you set the scene for the story you are about to write. Continue in an easy, natural style as if you were telling it to someone. Include human interest incidents, to make the reader feel that he sees the event through your eyes.

In conclusion, sum up the points. In such a story you may emphasize the neighborliness of the pioneers and compare their farming methods with those of the modern farmer. You could pay a sincere tribute to Canadian pioneers who have left us a great heritage.



New Brunswick Clubs

TEAMS representing New Brunswick at National 4-H Club Week in November will be comprised of the two highest individuals in each of the projects. Even though members represent widely separated clubs, they will go forward as a team to represent the province.

In the past a winning individual often missed out on the trip to National Club Week because his teammate pulled him down to second or third place. In some cases an outstanding individual was unable to compete in provincial competitions because there was no club member of his age to make up a team. Under this new method of selection it is possible that more New Brunswick clubs will attend National Club Week.

Short turning and easy handling are advantages added to the fast work and light draft of Case Disk Plows and One-Way Plows. Power Steering on Case "500" and "400" tractors make every job easier.



CASE

"500"

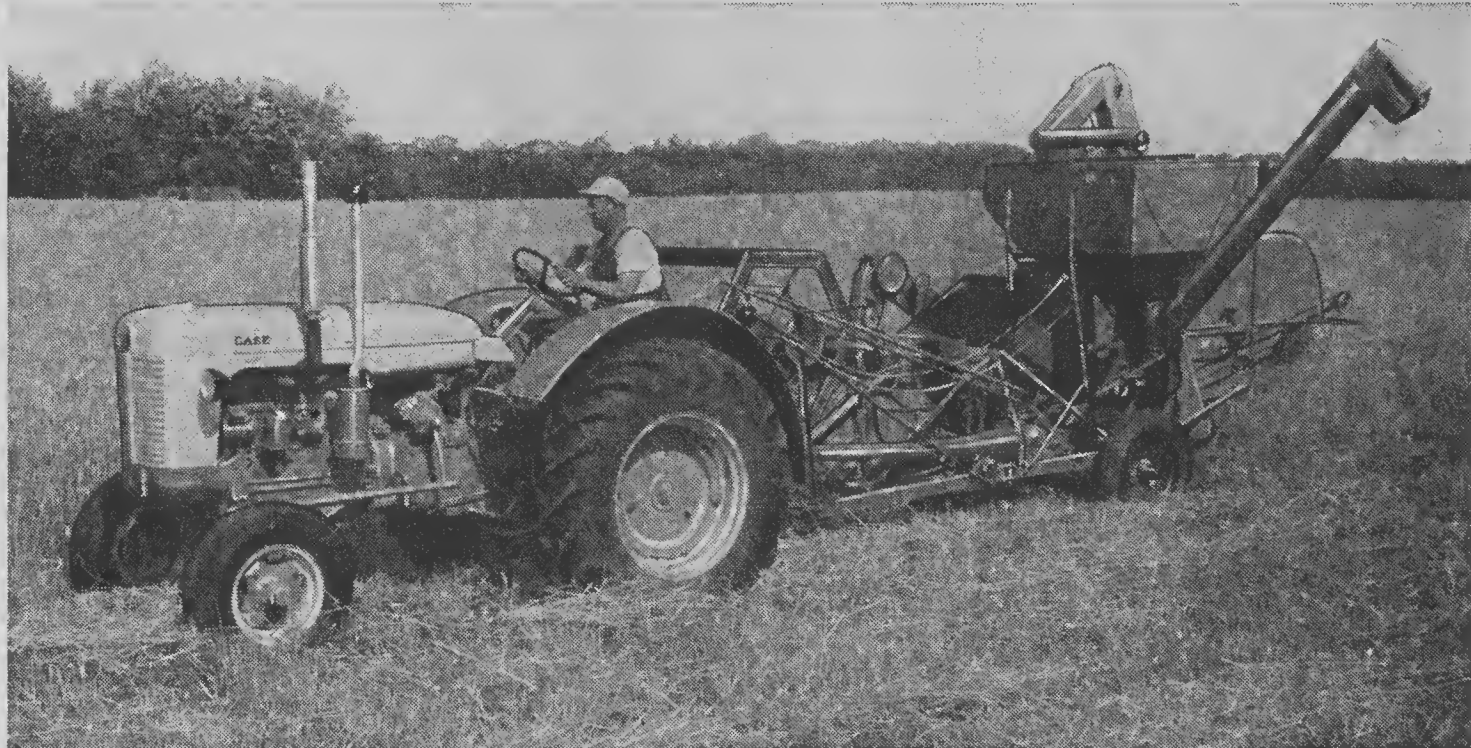
5-Plow

Diesel

"Saved \$500⁰⁰"

—R. J. Houghtaling
Saskatchewan

"My total fuel bill," Mr. Houghtaling reports of his Case "500" Diesel, "was \$150—a saving of \$500 over a gas tractor." T. I. Morrison, Manitoba, got even greater savings with his "500." He spent only \$176 for diesel fuel where he had spent \$830 for gasoline. "I operated my Case '500,' " he says, "700 hours on 800 gallons." Chris Linn, Saskatchewan, says his Case "500" averaged "2 gallons an hour . . . in 2nd gear on sticky, hilly land. No light loads." Says Arthur Dobson, Manitoba: "This engine is tops . . . it has only 600 hours on it because it does so much work in one hour." The sooner you put the 5-plow Case "500" Diesel to work for you, the sooner it will start paying you.



CASE "400"

4-Plow

Diesel, Gasoline, Propane, Distillate

In the 4-plow class, the Case "400" Western Special (above) is built with the step-up platform, full safety fenders and other special features you and your Prairie Province neighbors specified. Its 8-speed Powr-Range Transmission gives you just the right combination of engine, travel and PTO speeds for top performance and economy on every job and load. All Case Tractors give you comfort and conveniences you've never known, making dawn-to-dark days more comfortable and productive than ever before. The 7-foot "75" Case Combine shown is an easy load on the PTO of 4 and 3-plow tractors.



CASE "300"

3-Plow

Diesel, Gasoline, Propane, Distillate

Tripl-Range 12-speed Transmission and constant PTO give you flexibility and precision on the most exacting PTO jobs. They boost capacity, speed the work, hold down costs, make your work easier. You can't realize what a 3-plow tractor can accomplish for you until you've driven the dynamic new Case "300." See your Case dealer for a personal demonstration. Don't wait to start saving. Get the tractor you need when you need it on the flexible Case Time Payment Plan. For colorful booklets, send a card to J. I. Case Co., Dept. CG-56, Calgary, Edmonton, Saskatoon, Regina, Winnipeg, London, Toronto or Montreal.

B.F. Goodrich offers you 3 proven TUBELESS TIRES

B.F. Goodrich LIFE-SAVER

Here's the premium quality tubeless tire that gives you the maximum driving comfort and safety. The B. F. Goodrich LIFE-SAVER not only changes blowouts to s-s-slowouts, defies dangerous skids, but seals punctures as you drive. The LIFE-SAVER is also available in extra-strength Nylon. Think of the safety . . . the quality . . . and you'll buy B. F. Goodrich LIFE-SAVERS.

B.F. Goodrich SAFETYLINER

The tubeless tire chosen as standard equipment for new cars. The B. F. Goodrich SAFETYLINER changes dangerous bruise-blowouts to s-s-slowouts, giving plenty of time for a safe, controlled stop. Puncture hazards are reduced because the patented inner liner grasps the puncturing object tightly, restricting loss of air. Available in Nylon too!

B.F. Goodrich TRAILMAKER

GO when you want . . . STOP when you must—faster, with B. F. Goodrich TRAILMAKER Tubeless Traction-Tires. The TRAILMAKER gives you the blowout and puncture protection of tubeless tires. The wider, deeper, more flexible tread lets your car walk through snow, wade through mud, grip on slippery roads, and run quietly on bare pavement. This traction tread also available in truck sizes.

AND FOR FARM WORK . . .

B.F. Goodrich TRACTOR AND IMPLEMENT TIRES

Power-Grip rear tractor tires are bigger, and wider, give a deeper bite for more pulling power and full traction. If it's work you want . . . faster . . . at less cost . . . then you want B. F. Goodrich Power-Grip Tractor Tires.

B.F. Goodrich TRUCK TIRES

The rugged construction, scientifically-designed treads of B. F. Goodrich Truck Tires, give greater mileage, greater pulling power for every farm hauling job.

See Your
Local Dealer

56-50

B.F. Goodrich

For Every ROLLING WHEEL on the Farm

Stilbestrol and You

Continued from page 9

less hay and 11 per cent less grain per pound gained.

OVER a two-year period, eight different experiments were conducted at Iowa State College, involving 265 cattle. Eight other U.S. Agricultural Colleges also reported 11 additional experiments, making 19 in all, involving a total of 548 cattle. In 18 of the 19 experiments, live weight gains were increased consistently and feed costs reduced. Dr. Burroughs reports that averaging the many different kinds of rations and types of cattle fed in these experiments, the average increase in gain was 16 per cent, although 10 milligrams of stilbestrol or less was fed daily per animal in these experiments. Daily gain was notably better on the high-grain rations, as compared with the high-roughage rations. Steers also responded a little more than heifers on the same rations, and heavy weight cattle tended to gain somewhat more than light weight calves.

Similarly, the average reduction in feed costs was 12 per cent. In the eight Iowa experiments, the average reduction in feed costs was ten per cent, but in experiments at the other colleges it averaged 13 per cent. The appetites of animals seemed to be stimulated by about three per cent over all experiments, although in some, no increase of appetite was noted.

There was very little difference in carcass characteristics. Dressing percentage averaged the same in the nine experiments where data was available. Both Iowa and Michigan experiments indicated similar moisture content in the lean meat, whether animals had been fed stilbestrol or not. No detectable estrogenic residues in the beef were found from cattle fed ten milligrams of stilbestrol daily.

STILBESTROL is not a wonder drug, but a growth stimulant. All experiments seemed to indicate, according to a statement prepared by Dr. Burroughs, "that all fattening cattle respond favorably to stilbestrol, when it is added in proper amounts to feeds. . . . Cattle weighing 600 pounds appear to respond as well, relative to their size, as cattle weighing 1,200 pounds."

If you contemplate using stilbestrol, remember: Stilbestrol, in the Stilbosol, or pre-mix form, will be obtainable in commercial protein supplements from licensed feed manufacturers. Such supplements should not be fed at more than two pounds per head per day. Do not feed stilbestrol to other than beef animals weighing 600 pounds or more, and intended for slaughter. Do not allow hogs, or other animals, to follow the cattle in the feedlot. Discontinue feeding stilbestrol not less than 48 hours before the animals are to be slaughtered. Every feed containing stilbestrol must carry directions on the label, giving the pounds per day of the supplement to be fed to animals weighing 600 pounds or over, and must show a guarantee of the quantity of stilbestrol it contains, in per cent by weight. Follow the directions on the label. These are closely regulated under the Food and Drugs Act and licensed under the Feeding Stuffs Act.

ACCURATE DEPTH CONTROL at your fingertips.

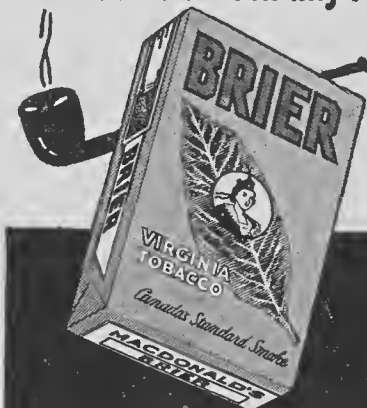
IT'S SO EASY, and costs very little to install a Dukes hydraulic cylinder on all kinds of trailing or mounted implements . . . lifts plows, cultivators, dozer blades as easily as lifting your finger. Both single and double action are available—built to aircraft standards where lives depend on them.

Write for free literature.



FALCON EQUIPMENT CO. LTD.,
P.O. Box 40, Station H, Toronto 13, Ont.
2875 St. Joseph St., Lachine, P.Q.
ALLIED FARM EQUIPMENT LTD.,
Sutherland Ave. at King, Winnipeg 4, Man.
GRAIN BELT FARM EQUIPMENT LTD.,
1348 Halifax St., Regina, Sask.
NORTHWEST FARM EQUIPMENT LTD.,
Cor. 7th Ave. and 6th St. E., Calgary, Alta.

Sweet and cool in any Pipe



BRIER

CANADA'S
STANDARD PIPE TOBACCO

did you know?

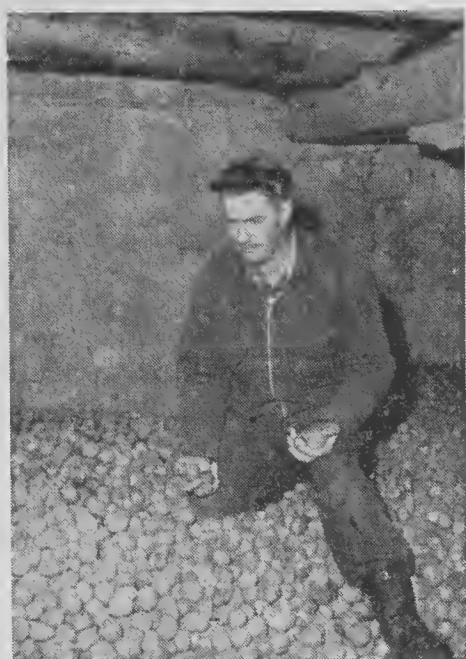


You can purchase fertilizer with a loan from the Royal Bank. Talk it over with the friendly 'Royal' manager who serves your community.

THE ROYAL BANK
OF CANADA

A Hundred Acres of Spuds

This grower regards the need for satisfactory varieties as his most pressing problem



[Guide photo]

Leach sells most of his potatoes in the fall, stores his seed in the winter.

It takes a lifetime to learn how to grow potatoes, says Clarence Leach of Alliston, Ontario; and since he has only been at it for ten years, he doesn't claim to have all the answers.

But from 1946, when he rented 17 acres to grow his first crop, until now, when he has 250 acres of his own land and is growing over 100 acres of potatoes, he has been constantly searching for better ways to grow and sell the crop. This has been a full-time job.

In fact, there seem to be more weaknesses in Ontario's potato program than for almost any other crop.

For instance, Mr. Leach isn't satisfied with the variety he grows, but hasn't located a better one yet. He has grown a lot of the controversial Ontario variety lately, and admits that it isn't the best cooker in the world, but says that it is at its worst after winter storage. Since he sells potatoes in early fall, before the P.E.I. potatoes come into Ontario in volume, they are eaten before they deteriorate. They have the advantages of being light-skinned, smooth, with shallow-eyed tubers. And they are scab-resistant, an important factor when potatoes must be grown repeatedly on the same land.

But he is searching for better varieties, and has been trying Netted Gems and Russetts on the farm. He will try Cherokee from P.E.I. this summer; and admits that he would willingly sacrifice some yield if he could be assured of a top-quality potato.

Culturally, Mr. Leach isn't afraid to do some experimenting on his own. He has decided that his land is too expensive for his three-year rotation, leaving him with only one-third of the land in his specialty. He has therefore decided to try a two-year rotation, with grain followed by rye in the fall, to be plowed under in spring before planting time.

SELLING is the most pressing farm problem these days, and he has tackled it by putting in a rubber-spool sizer and grader. By September, when the crop starts to come off, up to 15

persons will be employed on the farm, several of them on the grader, where 10, 50 and 75-pound bags will be packed for sale. He sells through a broker in Toronto, who distributes many of them through the chain stores. Inspectors, of course, visit the farm daily during harvest season to check on the quality of the pack.

Since most of his crop is shipped right from the field in the fall, he doesn't require large storage houses, but does maintain one 8,000-bag storage for some winter potatoes and for seed. ✓

Forage Seed Supplied at Cost

ADEQUATE supplies of Grimm and Ladak alfalfa seed are available this spring for the Saskatchewan forage crop program, which is sponsored by the provincial Department of Agriculture. There is also seed for brome, crested wheatgrass, tall wheatgrass, sweet clover and mixtures, and plantings are expected to be heavy this year.

The scheme was started in 1947 to encourage pasture improvement, soil protection and the building of feed reserves by providing high-grade seed at cost, with the department meeting the cost of bagging, handling and shipping. Since then, 26,000 orders for a total of 3.5 million pounds of seed have been met.

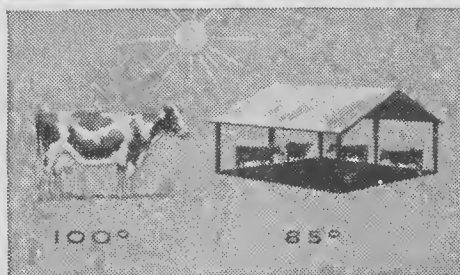
In a recently published survey of the forage crop program, which was compiled from questionnaires sent to 1,342 farmers, it is shown that before the scheme was introduced, 75 per cent of the farmers in the prairie area had not grown forage mixtures, 65 per cent in the parkland, and 55 per cent in the wooded area.

The survey shows that 80 per cent of the farmers seeded forage mainly for winter feed. Secondary reasons were for pasture and improvement of poorer sections of the farm. On the other hand, nearly three-quarters of the farmers said they had no rotation plans for forage in their cropping systems, and only 11 per cent intended to develop them. Most of the remainder had followed four or five-year rotations.

The vast majority now plant the forage seed with a seed drill, oneway disk or disker with seed box, but eight per cent still broadcast the seed on the surface and cover it with a harrow or by other means. A nurse crop is used by 75 per cent of the farmers in the survey, with oats accounting for 64 per cent of this, wheat 25 per cent, barley five per cent, and other crops six per cent. Wheat, oats and barley are recommended as nurse crops in that order.

In recommending the scheme, Hon. I. C. Nollet, provincial Minister of Agriculture, says: "Past experience has shown that a stable livestock industry is dependent primarily on adequate fodder reserves, and the forage crop program allows farmers and ranchers a means to establish such reserves." ✓

Comfortable cattle produce more...



A 15-degree difference in summer temperature can mean your cattle gain or don't gain. Butler metal buildings can provide this difference.

Weather-tight construction features keep Butler metal buildings warmer, drier in winter. Livestock stay comfortable, produce more.

Help keep 'em that way in **BUTLER** metal buildings

Livestock stay healthier, eat more, gain more, and are worth more money when they are comfortably protected from both intensive heat of summer and extreme cold of winter.

These are facts proved through research by the U. S. Department of Agriculture and leading agricultural colleges.

Wherever you live, whatever the weather, Butler metal buildings, with dozens of weather-tight construction features, provide your livestock with the utmost protection from temperature extremes.

In summer, Butler aluminum roofing reflects heat, lowers temperatures a full 15 degrees by actual test. Big doors and roof ventilators permit ample air circulation. In hot and temperate climates, Butler open-sided field shelters provide cooling shade and maximum air circulation.

In winter, Butler metal buildings, with every die-formed piece snugged tightly together with weather-tight fasteners, provide comfortable, easy-to-insulate shelter that can't be penetrated by cold, sleet or snow.

But you get more than livestock protection. Butler's tight construction also affords excellent weather-tight, rodent-proof feed storage. Forage stays cleaner, drier, is better for your livestock.

Ask your Butler builder about

BUTLER'S CATTLE PROTECTION FEATURES

Alberta	Manitoba	Ontario	Saskatchewan
Calgary Steel Building Sole and Service Calgary	Frank Lowson & Sons Ltd. 601 Ninth Street Brandon	Barnett-McQueen Co., Ltd. P. O. Box 39 Fort William	Lovold's Limited P. O. Box 64 Lloydminster
Permasteel (Alberta) Ltd. 10187-103rd St. Edmonton	Midwest Mining Supplies Limited P. O. Box 520, Flin Flon	The George Taylor Hardware Ltd. New Liskeard and North Bay	Western Tractor & Equipment Company Ltd. 1540-10th Avenue Regina
Oliver Chemical Co. Lethbridge Ltd. Lethbridge	Steel Structures (Western) Limited Winnipeg	Steel Building Soles and Supply Ltd. 159 Bay Street, Toronto	Western Tractor & Equipment Company Ltd. 625-1st Avenue North Saskatoon
Holte Norlund & Chisholm Lethbridge			



BUTLER MANUFACTURING COMPANY (CANADA), LTD.

Queen Elizabeth Highway at Walker's Line
P. O. Box 506, Burlington, Ontario, Canada

**Steel Buildings • Oil Equipment • Farm Equipment
Dry Cleaners Equipment • Outdoor Advertising Equipment • Special Products**

Adjustments For Oneway Disk

by CAM KIRK

THE oneway disk, when used at moderate speed, has proved to be a machine that will aid you in soil conservation, because it leaves a protective covering of trash.

The oneway, however, is the most difficult tillage machine that a farmer has to adjust. If you have trouble in

keeping your oneway from ridging, in steering your tractor when it is pulling a oneway, or if your machine tends to climb out of the ground every time it is pulled into a tough spot, it is probably out of adjustment.

Ridging, at a point where one round of work meets the next, is often caused because the front disk of the oneway is not cutting its proper width. Steering difficulties are often experienced from the fact that the tractor drawbar is not in its proper position.

If a straight pull can be made from the very center-of-cut of the machine, right through to the front pin on the swinging drawbar, the tractor will then be allowed to turn about its center and you will find that it will steer much easier.

When the rear furrow wheel of a oneway tends to jump out of its furrow, the hitch is probably at fault again. It is probably too high at the point where it is attached to the oneway.

If you try to make any adjustments on the oneway, without doing them in their proper order, it is possible to waste a lot of time without getting a satisfactory job done. Therefore, it would be wise to make those adjustments in the following order:

1. If the machine has never penetrated the ground properly for you, do two things before you make any adjustments to the hitch. Sharpen the disks and set the machine to cut a narrower width. It will be worth sacrificing a few inches of cut to get the machine to do a better job. You will find the place to make the adjustment near the front left, or "land" wheel, of the machine.
2. Now hitch up the tractor, trip the machine into the ground and make a straight furrow.
3. Pull the machine back to that furrow for the second round, and get the front disk to cut its proper width (slightly less than the other disks).
4. Unhitch the tractor and disassemble the hitch and steering linkage of the oneway. Now drive the tractor to its desired position (usually when the two right wheels are in the furrow).
5. Attach one end of a piece of binder twine or trip rope, to the very front pin on the tractor swinging drawbar, and stretch the other end to the very center of the disk gang on the oneway, and at a point where it is at half the depth of cut.
6. Line up the main hitch with this straight line; take the slack out of it with the tractor; and attach any brace bars to the main hitch, at a point where their holes match holes on the main hitch. If you cannot find a point low enough on the frame of the oneway to attach the hitch to, you can make an extension, or buy one at your dealer's for this purpose.
7. Move the front furrow wheel on the oneway so that its front edge will lead slightly toward the disked land, and attach its steering linkage to the main hitch.
8. Go to the rear furrow wheel and give it a slight lead to the disked land also; then attach its steering linkage, if any, to the main hitch. If it has no steering linkage, adjust the stop screws to move it to the desired position.

When you carefully follow the above steps in the order mentioned, you will have the least difficulty in setting your oneway.

FREE SYLVAPLY PLANS show how to improve your home 10 easy-to-do ways!

Peter Whittall, Canada's Mr. Do-it-yourself, gives you step-by-step directions how to make attractive units planned for you by designer Fred Hollingsworth.



Cabinets & Shelving

Plan No. 120. A neat system of shelving—open or with doors—for living room walls, children's room or anywhere in the home.



Dining-Living Room Divider

Plan No. 125. Storage buffet with pass-through space and open shelving over, designed specially for open plan dining-living room division.



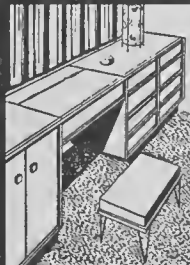
Counter Height Built-in Cabinets

Plan No. 121. Modern design with cupboards and drawers for dining buffet, den, or any room where counter height storage is needed.



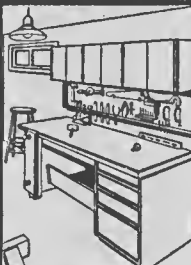
Panelling and Extra Rooms

Folder No. 126. How to build attic or basement rooms, with panelling ideas for all through the home.



Wall to Wall Vanity

Plan No. 122. Another popular "built-in" easily made in units and installed. Banks of drawers and cupboards flank neat fold-away vanity.



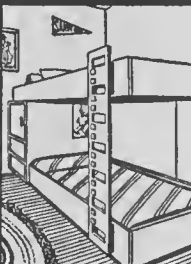
Work Bench & Cabinets

Plan No. 127. A sturdy work center for the home carpenter, so well designed you will want to paint it and make it a recreation room feature.



Master-Bedroom Storage Wall

Plan No. 123. One end of the bedroom becomes a generous Mr. and Mrs. wardrobe with sliding doors and lots of drawers.



Bunk Beds

Plan No. 128. One of the most unique and attractive double bunks with storage ever designed—it's so easy to build. No springs required.



Living Room Entry Divider

Plan No. 124. This unit takes up only a 12 inch strip of floor space—has closet on entry side, shelving and storage on living room side.



Modern Kitchen Cabinets

Booklet No. 113. Reprinted by popular demand! From a single cupboard to a bright new kitchen—16-page book tells you how to make kitchen cabinets in simple units.

Do it yourself or have it done—you save either way with

See your lumber dealer now for free home improvement plans. Get free advice on planning, on low monthly budget payments, on professional work-help if you want it.

SYLVAPLY

DOUGLAS FIR PLYWOOD

MacMILLAN & BLOEDEL LIMITED Serving Lumber Dealers from Coast to Coast
VANCOUVER CALGARY EDMONTON WINNIPEG LONDON WINDSOR TORONTO MONTREAL QUEBEC CITY



[Luoma photo]

It's got so you can't enjoy a quiet dinner without somebody dropping in.

Here they are!

NEW CHAMPS OF EVERY WEIGHT CLASS

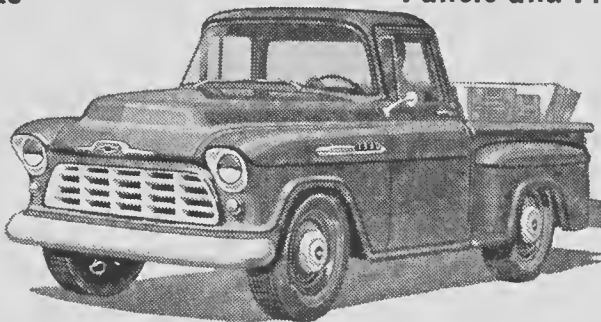


Rugged, Big, Tough New Tandems

**New models do more and bigger jobs!
New power right across the board —
with a brand-new big V-8 for high-
tonnage hauling!**



**Mighty, Versatile,
Ultra-Efficient
Medium Trucks**



**Modern, Nimble,
Ultra-Economical,
Panels and Pickups**

SEE YOUR CHEVROLET DEALER

**Now there are more reasons
than ever why anything less
is an old-fashioned truck!**

**New, wider range of models —
4 new heavy-duty series!**

95 completely new models with G.V.W. ratings ranging up to 32,000 lbs.

**New Triple-Torque tandems
rated up to 32,000 lbs. G.V.W.**

They're big, mountain-movin' tandems, rated up to 50,000 lbs. G.C.W.!

Two new 5-speed transmissions!

New heavy-duty 5-speed is standard in tandems and top-tonnage models.

**Tubeless tires, standard
in all models!**

Added safety and lower maintenance at no extra cost in all new Chevrolet trucks.

Modern, concealed Safety Steps!

They're covered when cab doors are closed... stay clear of snow, mud and ice.

Work Styling that fits the job!

Three different styling treatments — light-duty, medium-duty and heavy-duty!

**More comfort with
High-Level ventilation!**

A more constant supply of outside air under all driving conditions.

New colors! New cab interiors!

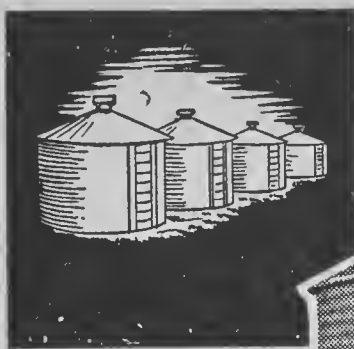
A choice of 14 handsome exterior colors — and 13 two-tone combinations at extra cost.

WIDE CHOICE OF ENGINES IN V8 OR 6

Brilliant, high-compression power throughout the line—new economical "go" in every model.

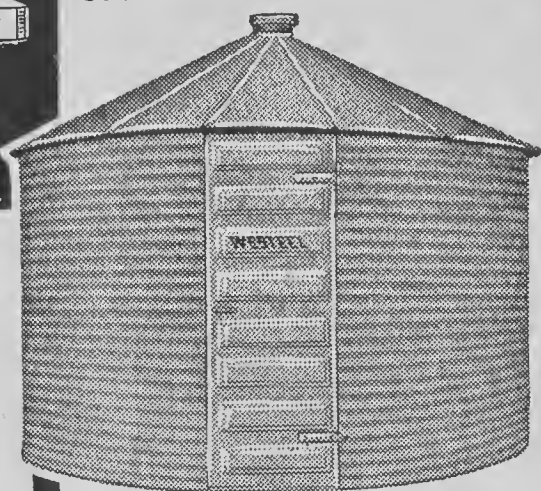
**WIDE CHOICE OF
AUTOMATIC TRANSMISSIONS
INCLUDING THE ALL-NEW
POWERMATIC — A HEAVY-DUTY,
6-SPEED AUTOMATIC!**

CHEVROLET *Task-Force* TRUCKS



2 SIZES
1,000 bus.
1,350 bus.

STORE YOUR GRAIN
SAFELY-AT LOW COST



IN A PORTABLE WESTEEL STEEL GRANARY

Built stronger
to last longer!

Has every feature
you need to
protect the quality
of your grain.

You'll always be happy that you decided on a proven-in-the-West Westeel Granary. Here's why: Heavy, curved, corrugated sections, die-punched for quick, easy erection, provide sure protection against weather, fire, and vermin. Easily moved, filled or emptied. Has full height door and handy unloading hopper. Durable, economical . . . the first low cost is the last cost. There is none better.

Enquire at your local dealers or write for particulars on Western Canada's most popular granary.

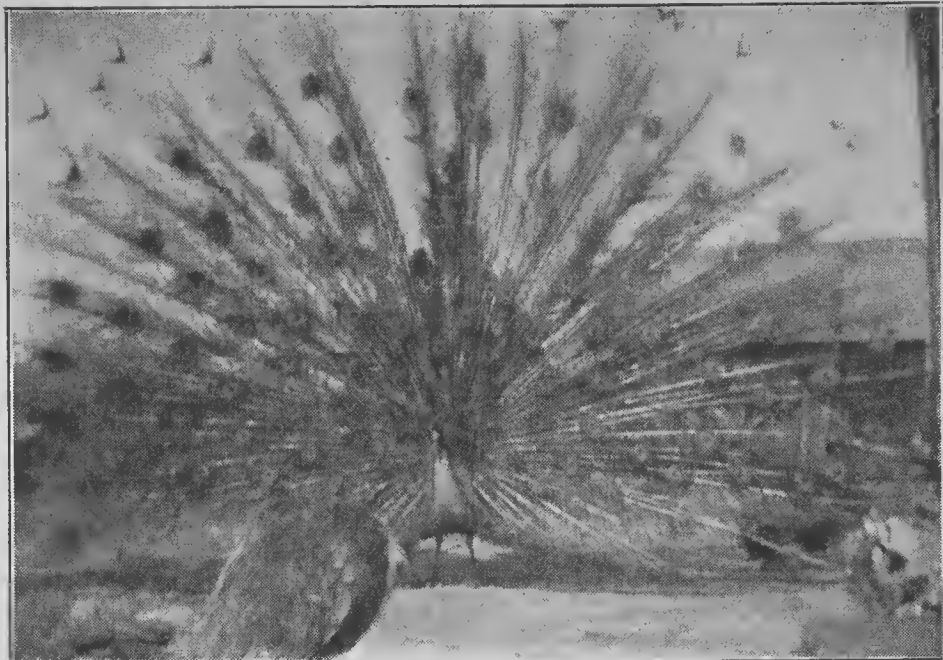
CG

AN ALL-CANADIAN CANADA-WIDE ORGANIZATION

WESTEEL

PRODUCTS LIMITED

WINNIPEG REGINA SASKATOON CALGARY
EDMONTON VANCOUVER TORONTO MONTREAL



Spreading his five-foot tail feathers, whose colors range from blue and green to mauve and bronze, "Gorgeous" proves that he is as good as he sounds.

His Name Is "Gorgeous"

by HILDA CROOK

EVER since I was a child of about ten, I have always wanted to own a specimen of the most beautiful bird in the world. Well, at last I own one—yes, a beautiful peacock, with a spread of tail coverts a full ten feet across. Can you imagine how beautiful he is?

I shall never forget going with my mother and father, while living in England, to visit an old aunt. She lived in a beautiful place, with a lovely velvety lawn in front of her house. On that lawn, surrounded by trees and flowers, walked a blue-shouldered peacock spreading that beautiful fan of iridescent colors, with the striking markings like large blue eyes.

He walked up and down that lawn all afternoon, while my sister and I sat there in the sunshine and admired him. I am sure he never had a more thrilled audience.

A peacock is a lovely pet. And they become so nice and tame, once you win their confidence.

I raised my first bird from a setting of eggs I sent for—six of them. How excited I was, when one egg hatched! It was the only fertile one, but I am sure no bird was ever taken care of more than that one.

I wanted it to be a peacock so badly; and when the little knot of feathers started to grow on its head I was sure that some day it would be. Alas, I did not know that both male and females have the head feathers. Well, it finally developed into a peahen, but I was very fond of her—she was tame enough to eat out of my hand.

Last spring we bought a peacock; and how pretty they were last summer walking around the garden! To see a peacock in a cage in a park is a beautiful sight, no doubt, but it is nothing to seeing a tame one wandering around your own flower garden.

They do no harm: in fact I think they do good, as they walk around the plants with careful, measured steps, seldom hurrying if not scared, and looking this flower and that over for the odd bug that may be there. I never tire of his beauty.

Peacocks must know how beautiful they are, or must take pride in their

lovely colored feathers and long tails, for when he arrived in the spring,—in a crate with an extension for his five-foot tail—, not a feather was out of place when we opened the lid. As he jumped out and the sun caught those feathers, it was a breathtaking sight. I said, "Isn't he gorgeous?" That has been his name ever since. He knows it, too, and comes when I call.

I enjoy seeing him around the door in summer, spreading that tail with the sunshine sometimes making it look mauve and bronze, then changing it again to blue and green, as he moves about.

I hope the sunflowers and wild cucumbers grow well, for they are so fond of the seeds; they even like the green pods of the cucumber, when quite young.

Steel Loafing Barn

FIRE destroyed a barn on the J. H. Crang farm at Newmarket, Ont., a year ago, but it is unlikely that the same fate will befall its successor, which is built of steel.

The replacement was needed in a hurry. The farm carries purebred herds of both Guernsey and Shorthorn cattle, and a steel barn could be erected fast. It was built as a loafing barn, laid out in the form of a giant E, and has proved satisfactory during its first winter of use.

Although a steel building represents a sizable investment, farm manager John Kudelka claims that it is an efficient type of permanent structure.

This barn, which measures 120' along its main length, with the arms of the E stretching 140', 60' and 100' from the back wall, is built with structural steel posts, set in concrete, on 20' centers. Eaves have a 12" overhang. The building is bolted together, and can be extended in any direction at a future time, by setting in more posts. Stalls can be laid out inside it, simply by running bars from post to post where required. The building can be erected easily, or changed in design, without calling in specialized assistance.

Firesafe Farm Houses with CANADA CEMENT



CONCRETE masonry farm houses are best because: 1) they offer protection against fire, floods and storms; 2) they are warm and dry in winter, economical to heat; 3) and cool in summer; 4) they last indefinitely and need little upkeep—therefore they are economical; 5) they can be built in any style.

Our 42-page booklet "Concrete for Suburban and Farm Homes" tells you everything you want to know about how to plan, build and decorate a farm home of lasting satisfaction.

Be sure to specify Canada cement—your guarantee of quality. Ask for the cement in the gray bag.

SEND FOR YOUR FREE COPY

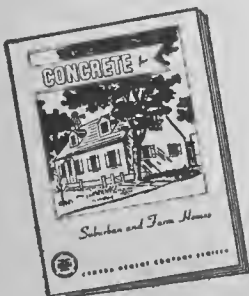
CANADA CEMENT COMPANY LIMITED
Canada Cement Building, Montreal, Que.

Please send free booklet "Concrete for Suburban and Farm Homes".

Name _____

Address _____

J-4



Rothamsted and Broadbalk Field

Continued from page 11

ments have disregarded organic fertilizers. Examination of the literature that has been published from this Station proves otherwise. A great deal of research has been done here on the part played by humus in the soil, and methods of making compost have been developed. The honors that were bestowed on Sir John Lawes and Sir Henry Gilbert indicated the great respect in which they were held by farmers and scientists alike. A granite boulder was set up by public subscription in front of the main laboratory in 1893, and bears this inscription: "To commemorate the completion of 50 years of continuous experiments (the first of their kind) in agriculture, conducted at Rothamsted by Sir John Bennet Lawes and Joseph Henry Gilbert."

WHILE many important research projects are under way at Rothamsted it is perhaps Broadbalk field which is most interesting to Canadian farmers, especially of western Canada, and particularly to those who depend largely on wheat for their income. Here lies the answer to the question, "What will happen to the fertility of our prairie soil, if we continue to grow nothing but wheat?"

Broadbalk field has been cultivated and producing crops of various kinds for centuries, possibly since Roman times and, as mentioned heretofore, it has been producing nothing but wheat since 1843. During the first ten years of the test, the unfertilized and unmanured strip produced about 17 bushels to the acre, but with continued cropping year after year the yield dropped until it reached a level of about 12 bushels to the acre in 1900. Since then the yield has remained constant, with ups and downs caused by the weather. Apparently the soil minerals in this check strip are producing each year a certain amount of available plant food, sufficient to produce 12 bushels per acre, and a state of balance has been reached.

What has been the effect of barnyard manure? One strip on Broadbalk has received a liberal dressing of barn-

yard manure each year since 1843. Today the soil is noticeably darker in color than the check strip, and the physical condition of the soil is better. This strip has increased in productivity since 1843, the yield from 1852 to 1925 averaging 36 bushels per acre. Compare this with the average check yield of 17 bushels per acre for the period 1843-1853.

What about chemical fertilizers? Sir John Lawes included over a dozen different fertilizers in the tests laid out on Broadbalk. Nitrogen, phosphorus, potassium and calcium were all found to be important in the soil here, and the best fertilizer mixtures, like manure, increased the productivity of the soil two-fold. The best treatment produced 37 bushels per acre, on the average, from 1852-1925, an average slightly above that for the manured strip. Some of the fertilizers used have proved to be of less value, due to a chemical composition unsuited to this particular soil. This was to be expected, since Mr. Lawes started his experiments at a time when very little was known about the use of chemical fertilizers.

Broadbalk field has demonstrated many other things besides the response of continuous wheat to fertilizers. It has shown that continued production of the same crop on a single field makes weed control very difficult; and in the case of some weeds the only control method so far devised on Broadbalk is hand-pulling. Herbicides are not used because of possible effects on the soil of the plots. Another feature is the effect of the various treatments on insect pests and diseases. One might be led, by some writers, to expect disease-free crops on the manured strips, due to the use of an organic fertilizer, and severe epidemics on the strips that have been chemically fertilized for so long. Such is not the case. The strips on Broadbalk show that disease resistance is related to the health and vigor of the crop, and that these are attainable by the use of proper chemical fertilizers as well as by organics.

Insects, too, attack all Broadbalk strips, and no tendency has been observed for the degree of attack to be associated with the various treatments, except as these have affected the general vigor of the crop. Where the stand of crop is good, the loss due to insect damage is likely to be proportionally smaller than where the crop is poor. Many important discoveries have been made on Broadbalk with respect to insects and diseases attacking wheat. A Rothamsted report refers to tests made on the nutritive value of wholemeal flour made from samples of Broadbalk field. Relative values for vitamin B₁ showed that wheat from the check strip was just as rich in this vitamin as wheat from the manured strip; and it was actually grain which received a chemical fertilizer that produced the flour richest in vitamin B₁.

In western Canada we produce wheat of high baking quality, and this feature has also been studied in the grain grown on Broadbalk. What has been the effect of fertilizers and manure on baking quality? Effects have varied considerably, weather playing an important part; and in general, none of the treatments has had a marked influence on quality of grain according to a 1940 report from

Good morning... I'm your Census Taker

When I call at your home during the month of June, the questions I ask will take only a few moments of your time—the name, age and marital status of those living at your address. In addition, this Census is particularly concerned with agriculture, so we are gathering facts about acreage, crops, poultry and livestock, milk and egg production, machinery and your operating expenses.

The information you give me will be kept in strict confidence. Every Census worker has taken an oath of secrecy. By Act of Parliament, the personal information gathered by the Census about individual Canadians can be used only for general overall statistics. It cannot be disclosed to any government agency or private organization.

Canada is taking count to keep up with her rapid growth. Census facts are required to meet and plan overall national needs—schools, public utilities, welfare services, farm and industrial production, employment.

The 1956 Census —
the essential measure
of Canada's
growth.

It's a big job—
cooperation will help
us do it quickly and
accurately.

Every census taker carries this official identification cord to show that he or she has been appointed by the Government of Canada to help take the Census. Ask to see it.

CENSUS OF CANADA, 1956

Form 13

Dist. No. AMT

E.A. No. AMT

DOMINION BUREAU OF STATISTICS

THIS IS TO CERTIFY THAT

John Doe

M.E. 1234 has been appointed Census Enumerator by the Minister of Trade and Commerce, for the Census of Canada, 1956. The above-named person is authorized under the Statistics Act to collect the information required to complete the census schedules.

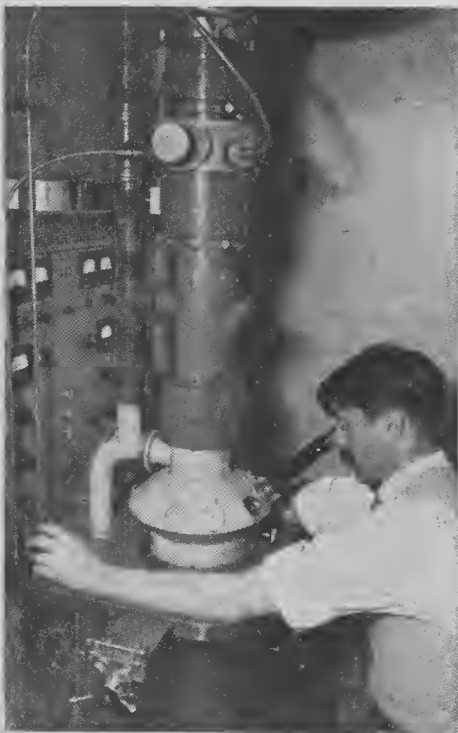
COUNTERSIGNED

Herbert Marshall Dominion Statistician

Census Enumerators are under oath to keep all information confidential and are sworn not to disclose any portion thereof.

DOMINION BUREAU OF STATISTICS
Department of Trade and Commerce—Ottawa

DBS-1-56F



[Rothamsted E.S. photo]

An electron microscope for magnification of plant tissues, microbes, etc.

HYPRO PUMPS FlexROTOR

For All-Purpose Farm or Home Use!

Filling stock or poultry tanks, pumping out basements, septic tanks, etc. Pumps CLEAN or DIRTY liquids at pressures up to 30 lbs.

- Reversible Flexible Rubber Impeller — only one moving part.
- Quiet Operation.
- Self-priming, designed for 1,750 r.p.m.

Three models to choose from

See your local hardware or farm implement dealer.

MANWEST ENGINEERING LTD.

Foot of Notre Dame East

Winnipeg 1, Man.



Always make sure that your mail is properly addressed, and that you have signed your name and address to your letter or subscription order. An omission will cause delay in filling your order.

the Station. The problem of improving baking quality has now been turned over to the plant breeder, and much progress has been made in Britain in developing a wheat of a good baking quality. The weather here in England, however, continues to be unco-operative for the production of top grades of wheat.

OTHER fields were laid out by Sir John Lawes to test the value of fallowing and rotations, with and without fertilizers. On Hoosfield, after a century of alternating wheat and fallow, the unfertilized strip is averaging 17 bushels per acre (8.5 bushels per acre per annum) and on Agdell field, wheat grown in rotation is averaging 27 bushels, which may be compared with the 12 bushels annual yield on Broadbalk. On Agdell field,

use of the best fertilizers increased the yield of rotation wheat from 27 to 41 bushels. These figures illustrate the important fact that neither fertilizers nor rotations by themselves will give maximum yields, but that they should be used together. This has been further demonstrated by our government experimental stations in western Canada and at the University of Alberta's experimental plots on grey-wooded soil at Breton. At Rothamsted, as at Breton, the inclusion of clovers in the rotation has boosted the yield of succeeding grain crops.

The fertilization of hay and pasture land is becoming a common practice in parts of western Canada, and it is therefore interesting to see what has been done at Rothamsted. Mr. Lawes started long-term experiments on grass in 1856, and the seven acres set aside for this purpose have now been in grass for 100 years. The unfertilized plots have averaged less than a ton of hay per acre each year. While the yield has not fallen off with the years, the quality of the hay is now much poorer than in earlier years, because weeds have crowded out much of the grass. Fertilizer treatments have had a great effect on both yield and quality of hay, the tendency being for each treatment to favor some particular kind of plant. In some cases the heaviest yielding plots now have the fewest number of species. Production of hay over a 56-year period was tripled by the use of the fertilizers best suited to the soil.

Other experiments started by Sir John Lawes over 100 years ago and still carried on, deal with the fertilization of barley and root crops. The results for barley have been similar to those obtained for wheat on Broadbalk. With root crops the use of barnyard manure has proven to be very important and the best crops have resulted from a combination of organic and chemical fertilizers.

While Rothamsted became famous under Lawes and Gilbert for its long-time classical experiments, and while these are still of great interest to the visitor and student of agricultural science, these experiments no longer hold the spotlight. Science marches on, and many and varied are the new problems that engage the attention of the scientists at this famous institution. The study of statistics has greatly changed the method of attacking problems, and new field experiments laid out in recent years are aimed at finding answers in the shortest time possible. As an aid to solving their problems, the agricultural workers here now use the modern tools of science—electronic computers, radioactive isotopes, electron microscopes, and so on. Even on the experimental fields the plow is now tractor-mounted and the scythe and sickle have been replaced by a combine-harvester. V

AUTO-LITE TIPS ON FARM ENGINE MAINTENANCE

GENERATOR BRUSHES usually perform for thousands of hours without attention or replacement. But, to be sure, they should be checked every 300 hours of operation. Worn brushes should be replaced and dirty commutators cleaned. Brushes should be replaced when they are worn to $\frac{1}{2}$ their original length or before they are worn to a point where the brush arm rests on the stop.

Clean the commutator if it is dirty or discolored by holding a piece of very fine sandpaper against it when the armature is turning slowly.

AUTO-LITE SPARK PLUGS HELP YOU HOLD YOUR HORSEPOWER



When you bought your farm truck or tractors you bought plenty of heavy-duty farm power — power you can retain longer with the extra service you get from Auto-Lite Spark Plugs. Auto-Lite gives you spark plugs ignition-engineered for each type of farm engine. For example, heavy-duty farm equipment calls for the Auto-Lite Transport Spark Plug, which offers these three great features for better engine performance in both tractor and truck —

1. **HEAVIER INSULATOR** with greater resistance to hi-voltage leakage and to breakage.
2. **INSULATOR TIP** Ignition-engineered to stay clean longer. Safeguards performance.
3. **OVERSIZED ELECTRODES** of a special alloy developed for maximum resistance to heat and electrical erosion.

This is the same heavy duty spark plug used in many of the nation's largest truck fleets—a multi-million-mile test of spark plug performance.

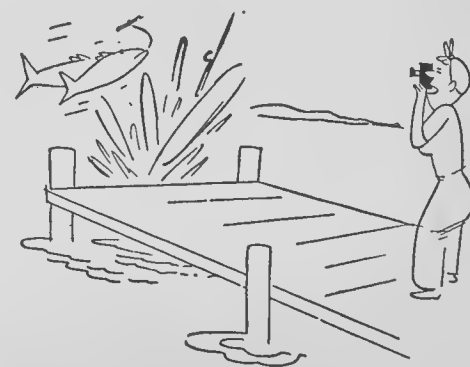
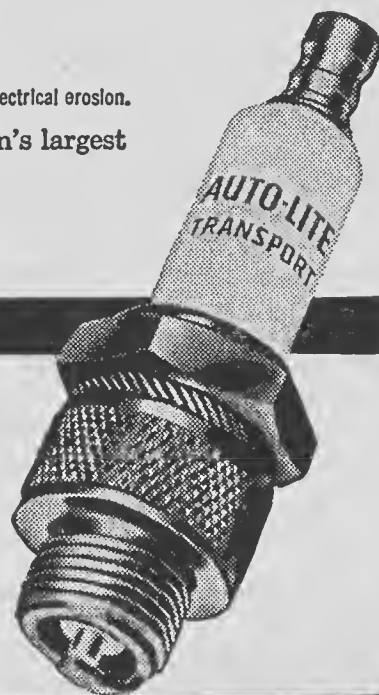
Your Auto-Lite Spark Plug Dealer carries a complete line of ignition-engineered Auto-Lite Spark Plugs in all popular sizes and heat ranges for every engine on your farm. Check with him, now!

Ignition-Engineered

AUTO-LITE

spark plugs

Auto-Lite manufactures over 400 products including Spark Plugs, Batteries, Wire and Cable and Automotive Electrical Systems . . . sold throughout the United States and Canada.



"That's too far back now, you're completely out of focus."

Shoo, Fly! Don't Light on Me

Killing one germ every minute, it would take 12 years to kill every germ found on a single fly

by DOROTHY E. VERDOORN

THE farmer's worst enemy isn't rust, hail, potato bugs, or drought—it's the common fly. "Common" because there are over 50,000 species of the small, deadly insects and because they multiply so fast in such large numbers. Mrs. Fly lays about 600 eggs in batches of from 100 to 120, in manure piles. Dr. C. R. Hodge of Washington, D.C., estimates that if the offspring of a single, over-wintering female lived and produced the normal number of flies, at the end of one summer not only would the entire world be covered with flies but they would be stacked more than three storeys high!

The true fly is a two-winged insect with a second pair of rudimentary wings. The Diptera class of this formidable enemy of man takes in the house fly, gnat, mosquito, horsefly and various crop and animal pests. The house fly is approximately three-eighths of an inch long and a quarter-inch high. As a germ carrier it has no equal. It's not choosy, it carries leprosy, bubonic plague, gangrene, typhoid fever, tuberculosis, amoebic dysentery, to mention no other diseases. As many as 6,600,000 germs have been found on the body of a single fly. Bulletin No. 51, issued by the National Foundation for Infantile Paralysis (U.S.), in outlining precautions against polio, takes a whack at the common fly. It says, "keep flies away from food. While the exact means of spread of the disease is not known, contaminated water and milk are always dangerous and flies have repeatedly been shown to carry the infantile paralysis virus."

The reason flies love to get into the milk and cream cans is because they love liquids; in fact, that is their sole diet. When a fly lets down its long proboscis on something solid, it softens it with saliva, until it can be sucked up its tube. When the fly departs, it leaves its trade-marks of hundreds of thousands of germs. The fly only lives two weeks, but in that short span does more damage than insects living much longer.

THE fly is a world citizen. He lives in all countries, spreading disease among mankind. Farmers are aware how flies torment their horses and cattle. Flies aren't easily discouraged—they don't know the meaning of a brush-off. Watch a horse on a hot summer day, trying to battle flies with the only weapon at his command, his tail.

When you chase a fly, the odds are against you. He has 4,000 separate lenses in each eye, or 8,000 in all. You only have two. You can't even sneak up on him when he's asleep, because he sleeps with his eyes open. There's one place, however, where they've caught up with flies—Moscow, Idaho. Flies were so scarce there during September, that entomologists at the University of Idaho were unable to catch a single fly for research experiments. This utopia came about by the use of DDT and good sanitary practice.

Another city, Columbus, Georgia, has achieved 90 per cent reduction in its fly population, and dysentery has shown a sharp decline. The cost of this experiment with DDT only cost the city 30 cents per person. Mason City, Iowa, which has a population of 60,000, last year got rid of their flies for an outlay of only \$2,500. The State of Iowa trains committees in fly-killing techniques. They put on an annual "No Flies In Iowa" campaign.

An old proverb says it is easier to catch flies with honey than vinegar. On the farm they have found some-



"soil cultivated, lawns cut... and not a penny for repairs in 4 years" says C. L. Perry

C. L. Perry of Byng Avenue, Toronto needs all the time and effort he can save for work in his greenhouses—he grows African Violets commercially. That's why he bought a Roto-Hoe. It makes a perfect seed bed in one easy operation, pulverizes compost for potting—and its rotary cutter (one of many handy attachments) trims lawns and even tall grass around trees.

"The \$150 I paid for my Roto-Hoe, 4 years ago, has been saved dozens of times in labour cost alone, and though all my neighbours borrow it, I've never had the slightest trouble, thanks to its Lauson 4 cycle engine", says Mr. Perry.

The 1956 range of 2 and 3 h.p. models are still low priced and even more dependable. Write for a free folder.



THE ROTO-HOE IS DISTRIBUTED IN CANADA BY:

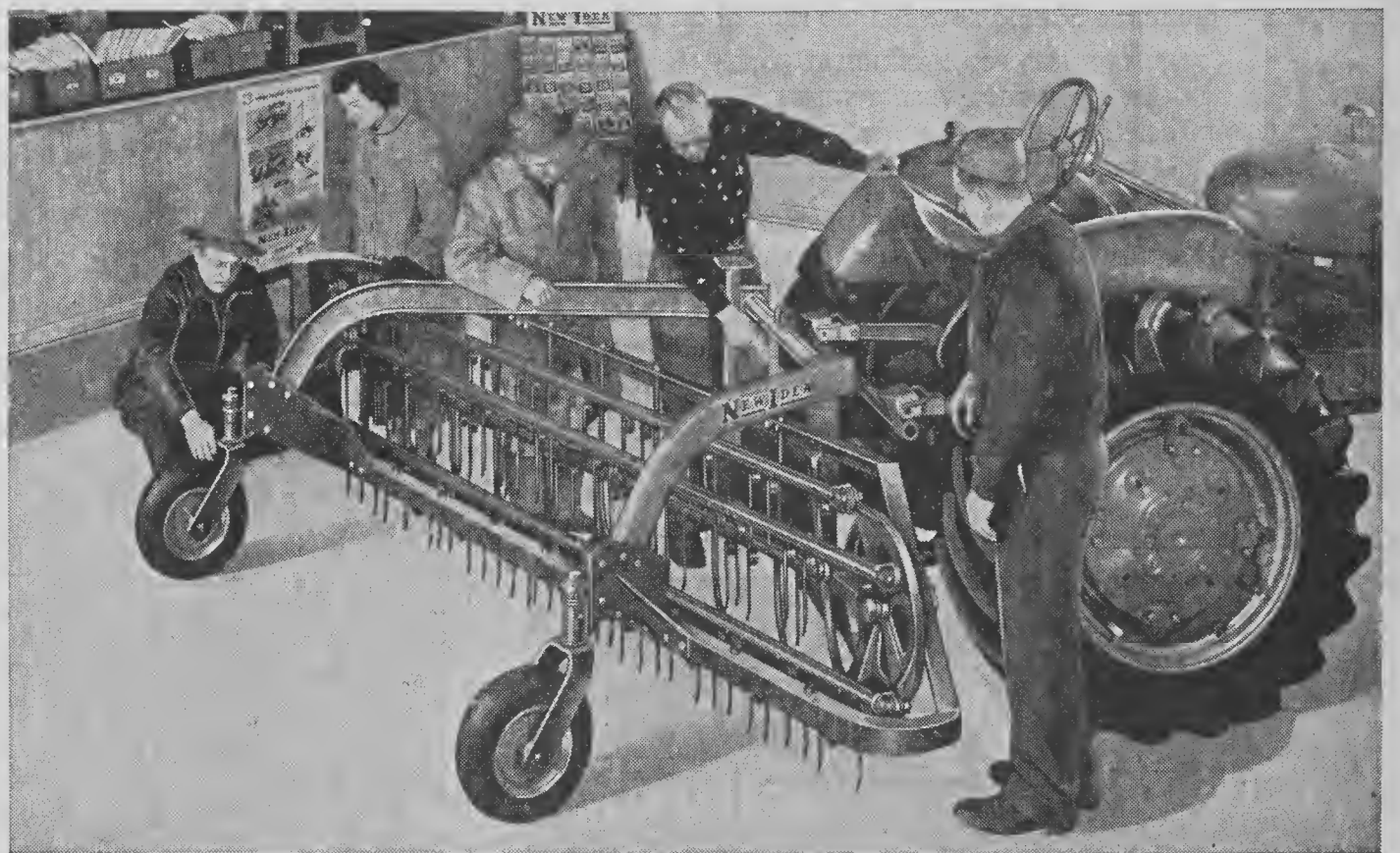
FALCON EQUIPMENT COMPANY LTD., Box 40, Station H, Toronto 13, Ont.; 2875 St. Joseph St., Lachine, P.Q.

ALLIED FARM EQUIPMENT LTD., Sutherland Ave., at King, Winnipeg, Man.

GRAIN BELT FARM EQUIPMENT LTD., 1348 Halifax St., Regina, Sask.

NORTHWEST FARM EQUIPMENT LTD., 7th Ave. and 6th St. E., Calgary, Alta.

ROTARY EQUIPMENT SALES, 523 Agnes St., New Westminster, B.C.



Brand new NEW IDEA mounted parallel bar rake is exciting the interest of farmers throughout the country.

Here's a really exciting new rake from NEW IDEA

New mounted parallel bar rake fits 24 different models of tractors, makes quality windrows fast.

This is a rake that will really speed your haying the quality way — an all-new addition to the NEW IDEA line of hay tools.

Unique in its field. Brand-new — the only mounted parallel bar rake that fits 24 different makes and models of tractors. Because it lifts, it maneuvers easily.

Cuts raking time. Rakes at higher speed with less leaf shattering. It can cut raking time almost in half. This is partly because this unusual new tool moves hay from swath to windrow with half the forward motion. A double driving sheave provides a choice of speeds to accommodate variations in ground conditions or tractor PTO speeds.

Makes fluffy, quality windrows. This new rake makes uniform, bunch-free windrows; your hay gets even curing. Puts leaves inside windrow, stems on outside. Handles hay gently in smooth, lifting,

rolling action. Makes unbroken windrows on corners, so baler operates without interruption.

This new rake really makes quality hay the NEW IDEA way.

Watch for the arrival of this unique new rake at your NEW IDEA dealer's. Write today for complete facts in new literature.

Best idea yet . . . get a New Idea

NEW IDEA FARM EQUIPMENT CO., DIVISION *AVCO* DISTRIBUTING CORP.

Coldwater, Ohio, U.S.A.

Send free literature checked

☐ Mounted parallel bar rake ☐ Booklet "Tried and New Ideas for Making Hay"

☐ Pull type rakes & tedders

Name _____

Address _____

Town _____

Calgary, Alberta
Northwest Farm Equip., Ltd.
Cor. 7th Ave. and 6th St., E.

Regina, Sask.
Grain Belt Farm Equip., Ltd.
1348 Halifax St.

Winnipeg, Man.
Allied Farm Equip., Ltd.
Sutherland Ave. at King

Vancouver, B. C.
Rendell Tractor & Equip. Co., Ltd.
62 West Fourth Ave.



For EVERY type of Barn PEDLAR'S RAINBOW RIB ROOFING

This popular brand of roofing has the NEW Strengthening Bar designed to eliminate nailing between the ribs, at all end laps!

FIVE MAIN RIBS FOR MAXIMUM RIGIDITY!

FULL 32-INCH COVERING WIDTH!

AVAILABLE IN GALVANIZED STEEL, OR "KINGSTRONG" ALUMINUM!

SEND DIMENSIONS OF YOUR BUILDING FOR FREE ESTIMATES.

* * *

PEDLAR'S COMPLETE LINE FOR THE FARM INCLUDES:

BARN AND STABLE EQUIPMENT	•	BARN DOOR TRACK
FARM ENTRANCE CULVERTS	•	WELL CURBING

Write for folders and prices:

THE PEDLAR PEOPLE LIMITED

555 Simcoe St. South, Oshawa, Ontario

Montreal - Ottawa - Toronto - Winnipeg - Edmonton - Calgary - Vancouver



G-46



removes **25%** more abrasives
than any other oil filter.



For all farm trucks, tractors, combines and other self-propelled equipment including diesel engines. Kralinator Oil Filters are used everywhere—sold everywhere. Ask for the BIG K.

KRALINATOR OIL FILTERS

thing more effective than honey, in the form of DDT. Farmers have found, by spraying their cattle with DDT, that milk production increased. A survey of sprayed and unsprayed dairy herds showed gains as high as 25 per cent in the amount of milk produced. Similar increases were shown in weights of beef cattle. When spraying DDT on farm properties, caution should be used, especially when spraying near feed troughs. Troughs and water containers should be covered.

Flies hate DDT. It has been found that they also hate the color blue. One

day a manufacturer, in an effort to cover his window to keep out the hot rays of the sun, painted his window glass blue. To his amazement the flies kept away from that window, although they covered adjoining windows. This idea could be used to advantage on various farm buildings.

The common fly is getting publicity which will eventually result in his demise. As a result, people in urban, as well as suburban, areas are beginning to recognize him for what he is—a menace to livestock and human health. V

Stanchion Barn Permits Individual Care

This Welland County dairyman stayed with the stanchion barn because he believed it would pay him to do so

RUSSELL YUNGBLUT, Welland, Ontario, long advocated the stanchion barn for dairy cattle, despite the claims of converts to the loose-housing system. When his barn burned in March, 1955, with the loss of 20 of his 40 head of cattle, he set out to visit a few dairymen, and see other systems in operation. He continually found one weakness of the loose-housing system that he couldn't tolerate—the cows can't be fed and cared for individually.

For instance, he explains, pointing to one of his best cows, "In six lactations of 305 days each, she has produced 84,000 pounds of milk. In that time, she hasn't dropped back a month, in her freshening date. Yet she is a cow that is shy in temperament. If she ran loose in a barn with the others, she would be last at the feed manger, last in to be milked, and probably a low producer. But she has made me money, because she has never eaten more than ten pounds of grain in a day."

As a result, he built another stanchion barn, this time with a built-in mechanical gutter cleaner. He remains among those cattlemen believing in the need of individual care for hard-working dairy cows.

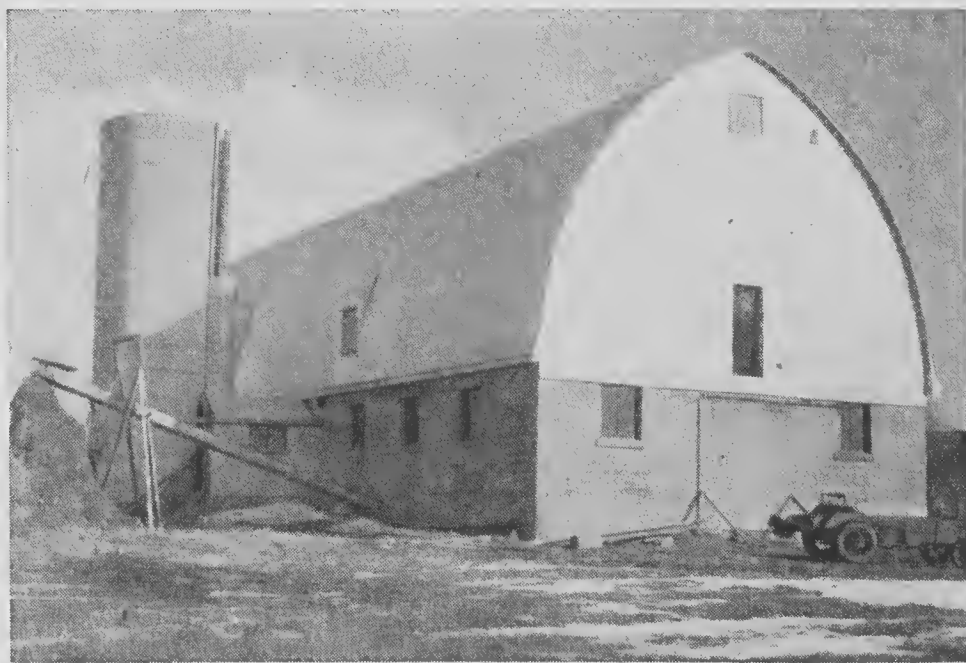
As a dairyman, Mr. Yungblut has obtained considerable success, by tempering his facility with a pencil, to his shrewd mind for good livestock management. One of the first to take advantage of the Ontario Dairy Herd

Improvement Association policy, his herd has been on test for six years. During that time, it has remained consistently close to the top in production, and in efficiency of production as well.

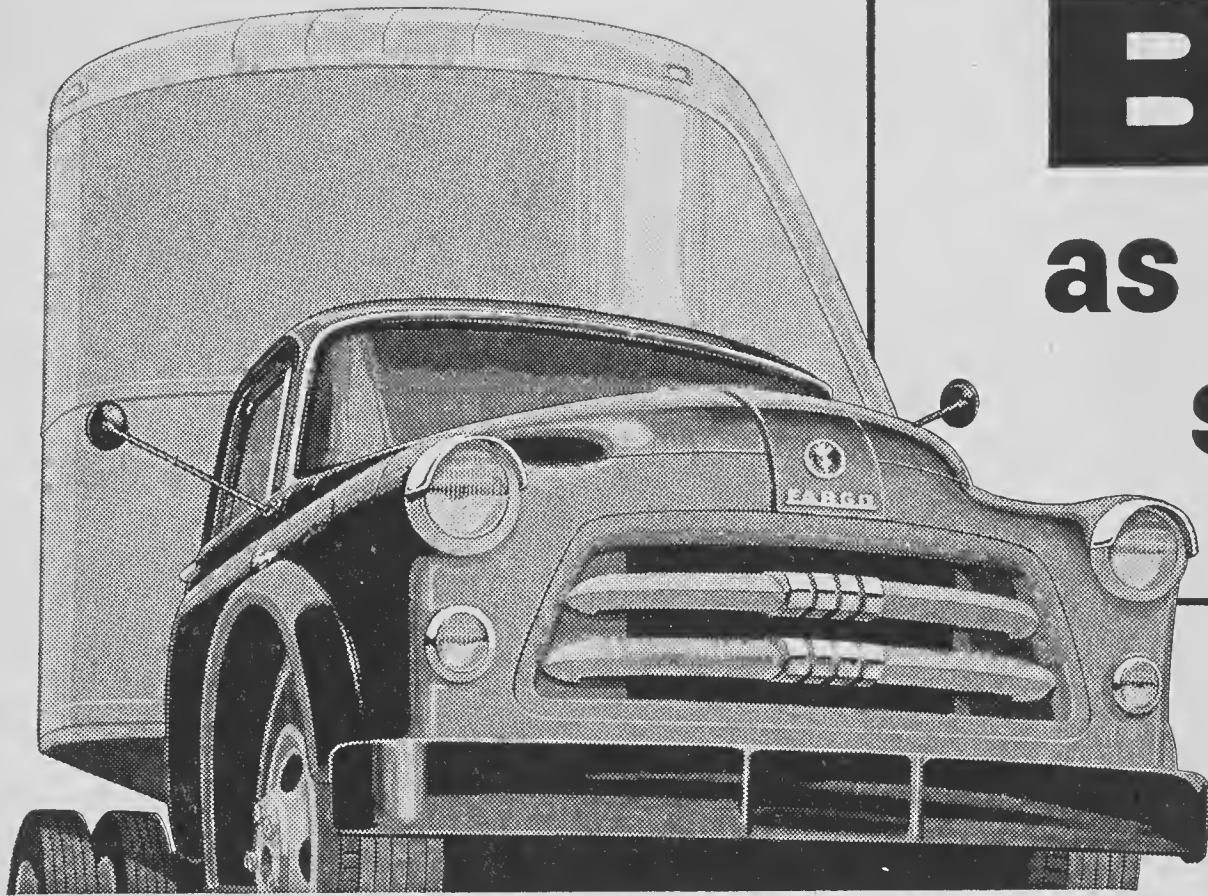
On 60 acres given over to farming on the home farm, and another farm for young stock, he has been milking close to 20 cows, and ships about 720 pounds of milk daily. He has developed a grass program that puts the emphasis on high-quality roughage, whether put up as grass silage, or as chopped hay dried in the mow with the hay drier. He gets along with one hired man, and in the first winter in the new barn, cut the labor requirement for the herd to 8½ hours daily. He contemplates installing a bulk cooler for his milk, once this becomes necessary, as he believes it will before too long.

Mr. Yungblut built the new barn of concrete block walls to the stable ceiling, with laminated rafters above, to provide plenty of open storage space. He allowed 25 stanchions for cows, to be ready to expand the herd if necessary. At one end of the 38-foot by 102-foot barn are box stalls for dry cows and calves, and these can be changed over to cattle stanchions if the herd is eventually further enlarged.

As a sideline to his dairy specialty, Mr. Yungblut has ten acres of grapes as a cash-crop, to provide welcome additional income in these times. V



[Gude photo]
This view of the stanchion barn built last year by Russell Yungblut shows the conveyor, which is linked with the mechanical gutter cleaning system.



Powerful 175-horsepower V-8 Fargo K8 Tractor and Trailer.

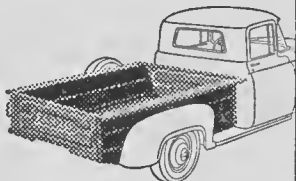
We build 'em
BIG
as well as
small

MAY IS SAFETY MONTH—DRIVE SAFELY!

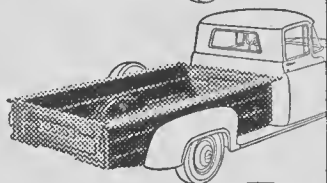
there's a **FARGO TRUCK** to fit your job!

NOW! Fargo offers 3 express models

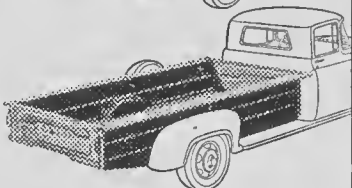
½-TON, 108"-
wheelbase model
has 78"-long, 49"-
wide body.



½-TON, 116"-
wheelbase model
has 90"-long,
54"-wide body.



1-TON, 125¾"-
wheelbase model
has 108"-long,
54"-wide body.



Choose the ONE you need

Chrysler Corporation of Canada, Limited

★ ★ ★

Watch Climax—Shower of Stars weekly on TV. Check
your newspaper for date and time.

*Power's up... costs are down...
that's why FARGO TRUCKS make money for you!*

NEW higher power! The right power and the right truck save you time on every trip. 12-volt electrical system means faster starting, greater capacity for accessories.

NEW bigger payloads! 5,000 lbs. G.V.W. to 46,000 lbs. G.V.W.; up to 65,000 lbs. G.C.W.! 6's and V-8's from 125 to 220 h.p. More payload, more profit, per trip.

NEW handling ease! Shortest turning trucks of all! Power brakes available, all models!

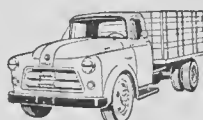
NEW chassis features! Increased capacity springs and axles on many models! Tubeless tires standard!

See your Fargo dealer now!

FARGO

—trucks built to fit your job!

5,000 lbs. G.V.W. to 46,000 lbs. G.V.W.; up to 65,000 lbs. G.C.W.



Husky Fargo
2-ton Stake.



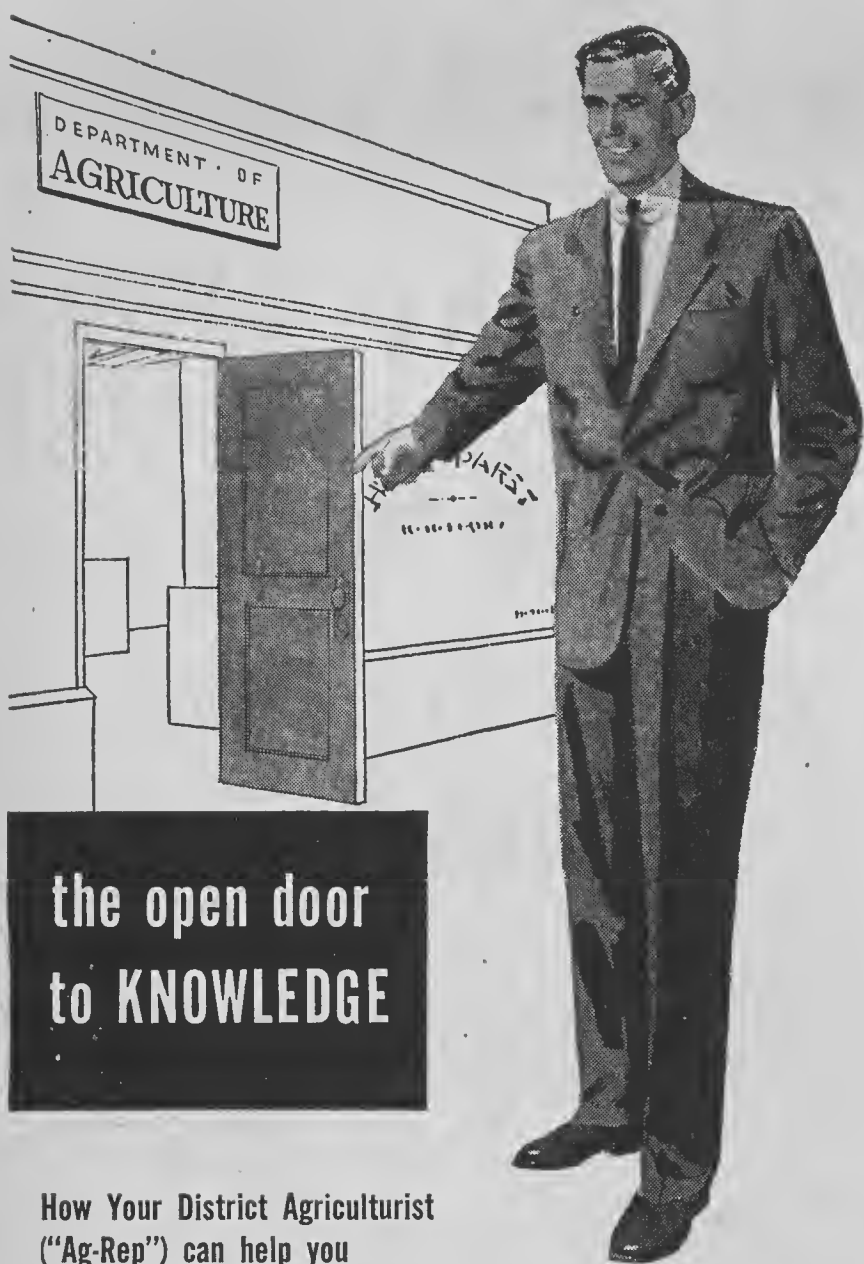
Easy-loading Fargo
B Model Panel.



Safety-built Fargo
School Bus.



Compact Fargo V-8
Cab-Over-Engine.



How Your District Agriculturist ("Ag-Rep") can help you

To farm profitably today, you need to be well-informed.

Valuable information about new developments in cropping practices and livestock husbandry — and about new marketing policies — is being published continually.

To bring the findings of research and experimental stations within the reach of every farmer, the Provincial Governments have over 350 District Agriculturists ("Ag-Reps") ready to serve you.

Your Provincial Department Office offers you:

1. Counsel in farm practices
2. Help in solving many of your farming problems*
3. Information on farm organization and community activities
4. Leadership in 4-H club and young farmers' activities
5. An up-to-date list of publications

It is good farming practice to work with your local District Agriculturist. Another good practice is to start a savings account at The Canadian Bank of Commerce. Add to it regularly; watch it grow. To keep expense records, use a current account, pay all bills by cheque; your cancelled cheques serve as receipts. Any of our personnel at our nearest branch will gladly help you open an account. Drop in soon.

THE CANADIAN BANK OF COMMERCE

MORE THAN 700 BRANCHES ACROSS CANADA

FM-176



RUPTURE-EASER

T.M. Reg. U.S. Pat. Off. (A Piper Brace Truss)



Pat No. 301933

Double... \$5.95
Right or left No Fitting Required
Side \$4.95

A strong, form-fitting washable support. Back lacing adjustable. Snaps up in front. Adjustable leg strap. Soft, flat groin pad. No steel or leather bands. Unexcelled for comfort. Also used as after operation support. For men, women, children. Mail orders give measure around lowest part of abdomen and state right or left side or double. We prepay postage except on C.O.D.'s.

PIPER BRACE (CANADA)
1242 McGill College Ave. Dept. CG-56
Montreal 2, Quebec



[G. E. Valentine photo]

New markets for apples have been developed in recent years and a fairly wide range of new products has tended to stabilize the market situation.

The Future Of Apple Consumption

The old apple barrel is gone, along with the old varieties. Is the apple itself to go, or can we preserve it, to help keep the doctor away?

by R. M. SCOTT

"A STEADILY increasing trend toward the use of packaged foods, and the mounting costs of producing prime, fresh apples, are convincing evidence that, in the future, there will be a relatively small proportion of apples sold as 'fresh.' Those that are, will be of a high-quality, dessert type, with a high degree of finish; and they will of necessity carry a relatively high price that will put them in the luxury or semi-luxury category." This statement was reported to have been made by the Dean of the College of Agriculture at the University of West Virginia, recently, when discussing the future of the apple industry.

While the speaker no doubt had in mind the apple industry in the north-eastern areas of the United States, is there any reason to question the application of his remarks to the whole of the U.S. and Canada? Or is there any hope that the trend of fresh apple consumption in Canada has not, or will not, follow much the same pattern as in the United States?

What do official United States Department of Agriculture statistics contribute in this regard? Consumption of fresh and processed apples, fresh-weight basis in the United States declined from 35 pounds per capita in 1935, to 25 pounds in 1954. During the same 20 years, consumption of fresh apples dropped from about 32.5 pounds to 19 pounds. In contrast, processed apples increased from two-and-one-half to six pounds. The increase consisted of canned apples, apple sauce, frozen apples and canned juice. There was no marked trend in the consumption of dried apples.

LET us take a look at some of the facts and factors involved in the changes that have taken place in the past 20 years or so. Changing ideas and standards of living have demanded new methods of presenting a product to the consumer. A flash-back in memory to grocery stores of 15 or 20 years ago would make this fact overwhelmingly evident. Grocery stores stocked bulk supplies in those days, which the clerks proceeded to break down into consumer-size pack-

ages to suit the customer's taste. Now, pre-packaging is the order of the day—even to pre-cooked foods—for almost everything the consumer buys, and in quite a wide range of size and amount for all staples. It is unusual to see fresh apples for retail sale offered in anything but transparent synthetic bags, at so much per pound. In other words, merchandisers of apples have applied the same technique to the sale of apples that they have applied to so many other products of the orchard and farm—with success. It would be wrong to blame the retailer for this. The people—we, the purchasers—are to blame, because we wanted it that way and still do, apparently.

A study by the family economics bureau of a Minneapolis insurance company points up the truth of the above. In a report on the cost of getting America's food from the farm to the consumer's table, it says that costs will keep on going up "because of our American taste for leisure and the quick, easy way." From two-thirds to three-quarters of the distribution charge represents wages of the workers who help perform the various distribution services. But the significant factor it forecast was that these services of convenience which have grown tremendously in the past quarter century, and which make the housewife's job quicker and easier, will, in the foreseeable future, be used by a still greater proportion of the population, and in an increasing number of such services. Is it reasonable to assume that apple consumption will not also be affected by these forecast changes? Already many changes have taken place and undoubtedly many more are to be expected.

Aside from the sale of fresh apples as such, we have the old, familiar and time-honored evaporated apple, and the more recent dehydrated kind, as well as apple cider. Perhaps, also, we are familiar with canned whole apples, canned apple sauce and apple slices, pie filler, apple juice and other by-products of the industry. We may become just as familiar with frozen apple pie, frozen or canned baked apples, or some other apple product, such as apple champagne—one of the

FOUR NEW MASSEY-HARRIS TRACTORS

Designed for tomorrow... HERE TODAY!

Take a good look at the new Massey-Harris Power Line—four great new tractors that have caught the imagination of farmers from coast to coast. In every way—from their sparkling red-and-bronze paint job on the outside to the extra fuel economy on the inside—they're world-beaters. Better take a *long* look. You'll find it pays!

Next time you're near a Massey-Harris dealer's drop in and see the 333 and 444. Here are some of the advance-design features to look for.

Hi-Lo Transmission has 10 forward speeds, 2 reverse.

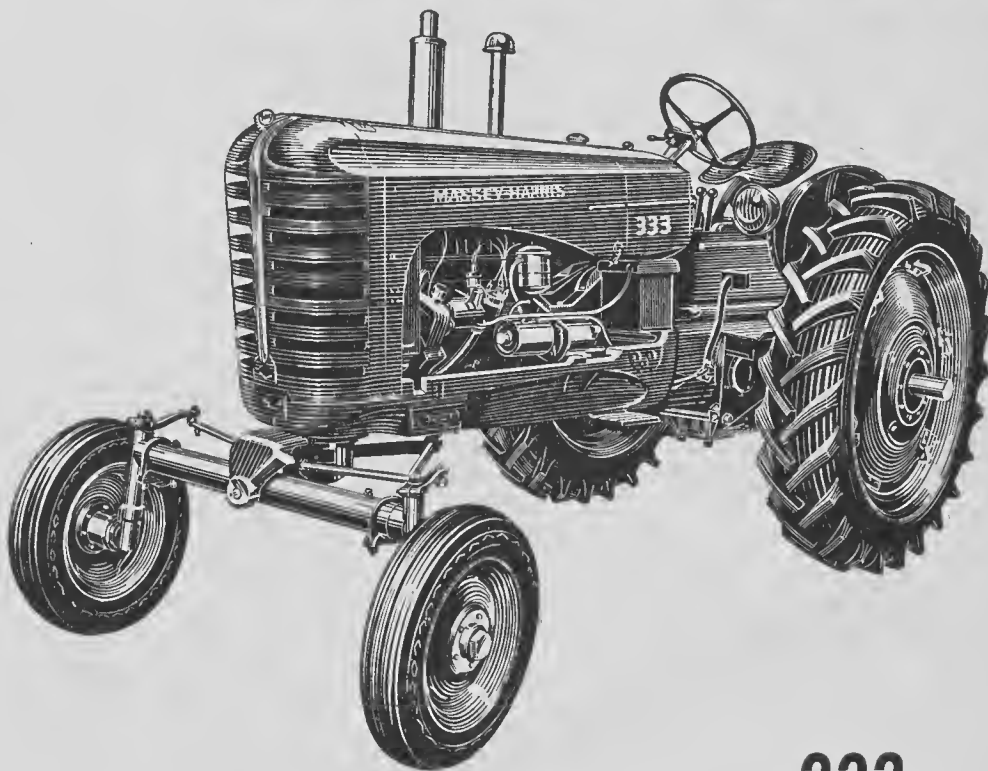
PowerSteering—optional at small extra cost. Direct-Line PTo gives straight through power flow.

12-Volt Electrical System guarantees sure-fire starting.

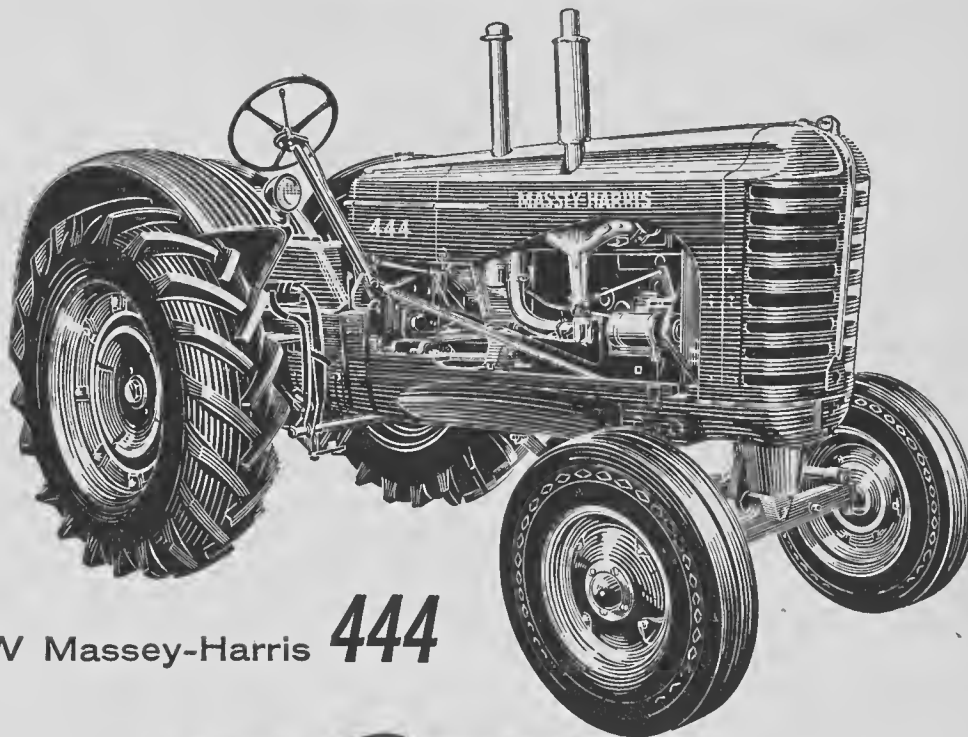
Power-Adjusted Wheels can be spaced from 56 to 80 inches.

Wrist-Action 3-point Hitch eliminates jockeying in hitching.

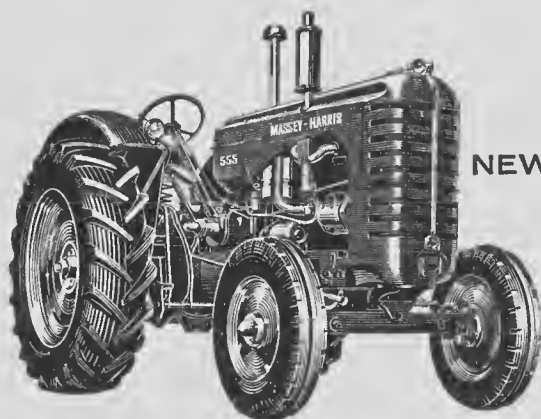
Available in Diesel or Gasoline, Standard, Hi-Arch, Twin or Single Front Wheel.



NEW Massey-Harris **333**



NEW Massey-Harris **444**



NEW Massey-Harris **555**

The biggest tractor in the Massey-Harris Power Line. Gets more work out of every gallon because it uses fuel according to the load. Makes light work of the toughest jobs.



NEW M-H **50**

A radically different kind of 2-3 plow tractor, it's years ahead of its time. The big change is Hydramic Power, a new system of razor-sharp implement control. Four models.

The **POWER LINE** with Tomorrow's design today

Massey-Harris-Ferguson

Toronto, Canada

LIMITED

FAST RELIEF FOR ACHING MUSCLES



newest in the field—or, perhaps some other apple-based preparation as yet unheard of. The more outlets for apple products there are, the more readily, perhaps, apples can withstand the increasing competition.

APPLES are being marketed in a highly competitive field, whether in the domestic or export market. Other fresh and processed fruits, through the modern miracles of communication, refrigeration and transportation are making the competition keener. Per capita consumption of fresh apples appears to be on the down grade. Costs of production are tending higher. To name a few of these economic factors, we must list labor costs, costs of transportation,

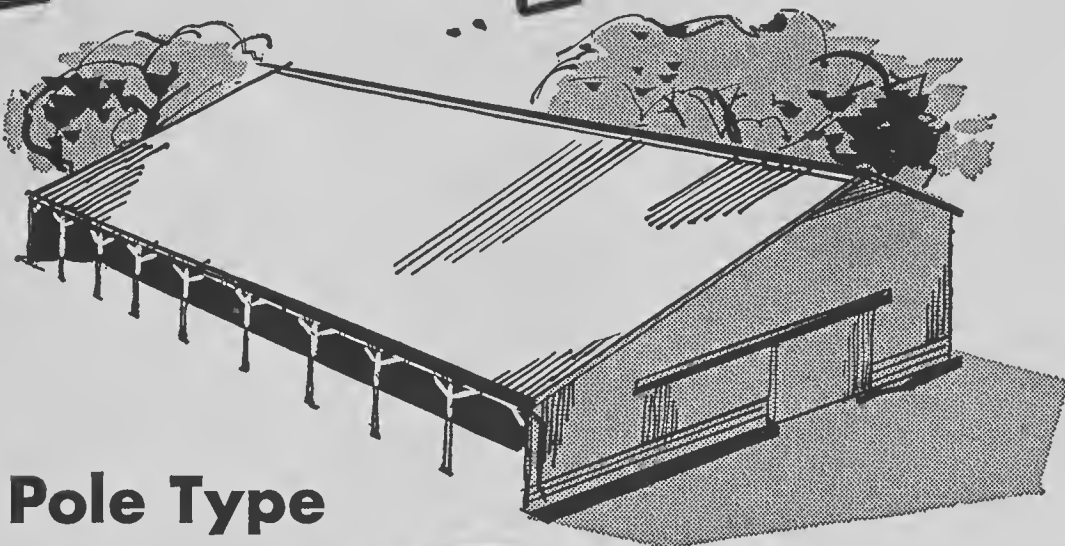
costs of production (spray programs), storage costs (including storages), packaging costs, as well as wholesaling and retailing costs, not excluding advertising. In addition, the consumer product must be one that suits modern housekeeping practice. The acceptability of the product in the home must not be overlooked. Purchasers, that is, consumers, tend to be more critical of a high-priced article of food, than of a lower priced one, as far as quality is concerned, especially when they are willing and able to pay for it.

What of the future of apples, then? In general, it would appear to be a contest between production, merchandising costs, competition and price, on the one hand, against quality, suitability and acceptability of the product

on the other, whether the offering be fresh, or processed. If the gentleman from the University of West Virginia is to be believed, it will be increasingly important to recognize and consider his conclusion that a relatively smaller percentage of the apple crop will be retailed as fresh, and that most of it will be sold in processed, or packaged form. Also, that that portion of the crop marketed as fresh must be selected and presented to the consumer in a package, quality and variety calculated to meet all competition. As for the major portion of the crop which would be processed, surely the same high standards would apply. V

As in the bosom of the earth vestiges of all earlier life may still be found, so in the bosom of public opinion are to be found vestiges of the early dinosaurs of thought.—
Alvin Saunders Johnson.

LOW FIRST COST! LONG TERM SERVICE!



Pole Type Structures

built with

CCC

TRADE MARK

*pressure treated
poles and lumber*

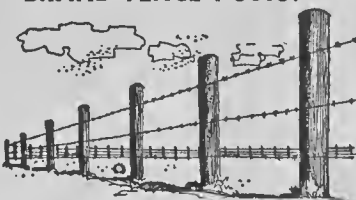
NOW AVAILABLE FROM YOUR BUILDING SUPPLY DEALER

Pole type construction is the up-to-date, low cost method of building all types of farm structures. They are quick and easy to erect, no skilled carpentry is required and building costs are reduced by up to 50%. To insure low first cost and long term service be sure to specify "Triple C"* Pressure Treated Poles and Lumber. For "Triple C" pressure treatment provides complete protection against rot and decay.

Pole type construction is the modern way to build

**BARNs • HORIZONTAL SILOS • STORAGE SHEDS
CATTLE SHELTERS**

FENCES STAY UP WHEN
YOU USE "TRIPLE C"
BRAND FENCE POSTS!



Proven in years of service are fences built with pressure treated posts. For dependable, economical fencing use "Triple C" brand posts.

SEND FOR **FREE** CATALOGUE
OF PLANS . . . FILL IN COUPON . . .



This catalogue shows basic plans for a number of pole type structures which are available and which can be adapted in size to meet your requirements.

*Trade Mark

CANADA CREOSOTING COMPANY LIMITED
P.O. Box 255, CALGARY, Alta.

CG56-3

Please send me illustrated catalogue on Pole-type construction with "Triple C" Brand pressure treated wood.

Name.....

Address.....

City.....Prov.....

**CANADA CREOSOTING
COMPANY LIMITED**

Manitoba Turkey Growers Organize

NEW interest is being taken in turkey raising in Manitoba. Up to a year ago, the only organization representing turkey growers in the province was the Manitoba Turkey Breeders' Association, which existed for approved flock owners, but not the commercial growers. Accordingly, at a meeting in Winnipeg last year, the name was changed to the Manitoba Turkey Association, and J. J. Reidiger, a turkey broiler grower from Morden, was elected president.

This brought in the commercial flock owners, and before spring was over, the province was divided into areas, each with its own director on the provincial board. Membership was retained in the Canadian Turkey Federation, which aims to bring together all local groups working toward better breeding, feeding and marketing of turkeys. Mrs. Clifford Lund, Elkhorn, was appointed director for Manitoba in the Federation, and attended the annual convention in Hamilton, Ontario, which was the first time that a turkey convention had been held in Canada independently of other poultry groups.

The turkey industry is growing rapidly in Canada, and especially in Manitoba. People are beginning to recognize the nutritive value of turkey meat, instead of regarding it as something for special occasions only. Ontario and Quebec raise large quantities of turkeys, but their heavily concentrated populations consume huge amounts, and there are good markets there for western turkeys. Manitoba, with few large cities, and having plenty of grain and a suitable climate for raising turkeys, is naturally interested in exporting them.

The convention at Hamilton discussed the establishment of the Canadian turkey industry on a sound basis, and there was a general desire to grow a superior Canadian product, which could compete successfully with American imports, and give Canadians the sort of turkey they have a right to expect. Manitoba was able to secure better turkey insurance at lower rates, and obtained details of bulk purchase of medicants, equipment and some feeds.—Mrs. C. Lund. V

Family Farms For the Future

CALL the Bob Anderson farm at Caledonia, Ontario, a model for the future if you like. It's a family farm. It is run by a youthful Canadian, with a keen sense of business, a diligent interest in a complete set of farm accounts, and a practical outlook that keeps him busy in barn or field, as the need requires. He has built a dairy specialty farm, but by adding a hog-feeding and a seed grain enterprise, he has gained diversification enough to provide full-time jobs for three men the year around.

Bob Anderson and his mother were left with the farm when he was just 14 years old. They hung onto it, developed it during the good post-war years, and set up as well, a big custom-machinery business. Recently, he gave that up and has concentrated on his dairy herd, which he plans to enlarge to 60 cows. With his seed cleaning plant, and his eight-sow swine herd and hog-feeding business, he has a three-sided operation which should provide a reasonable guarantee of stability and income.

He observes with some regret now, that "there is no place in today's farming for young chaps starting out with no capital to invest. Profit margins are so slim that larger volume is required. Even now, the bulk milk tank is just one more factor driving the small dairyman out of business.

Mr. Anderson devotes at least half an hour each day to his books. "That's where a farmer can make or break his business," he believes.

His chief preoccupation during recent years has been to search out ways of cutting costs. While once he fed a 16 per cent protein ration to the herd, he has lowered this to 14 per cent, cut the quantities fed in half, and finds that with his good quality roughage, and the better breeding stock he uses now, production has actually increased and the cows have suffered less breakdown. Also, he used to sell second-cut hay, but now he feeds it. He is strip grazing during summer, now, too.

Labor is a major problem today. To meet this, Mr. Anderson organized his farm operations to justify three men the year round. The work schedule was arranged so that the men can have their work completed by six p.m. If they work overtime, they are paid a dollar an hour for it. They get a long weekend, from Saturday noon to Monday morning, every third week, and they get a week's holiday with pay, annually. He knows that he can't compete with industry when it comes to wages, but he can provide good work-

ing conditions. And like many farm people, he is aware that city people pay a high price for some of the joys of rural living. That very factor has helped him to retain good men.

In a recent major decision to expand the dairy barn, he designed his own stanchion barn—extending it out 80 feet past the old stable. He decided on a stanchion barn for several reasons—he admits simply that he likes to have the cows tied. But he justifies the added work this way:

"They are easier to display to buyers, and sale of surplus stock normally brings important income to the

farm. In stanchions, we can give the cows individual attention too."

He notes that he required barn space for seed cleaning equipment, as well as for hay and straw, and figured that a mow above the stable was as good a spot for this as anywhere. He installed a mechanical gutter cleaner to ease the most burdensome dairy chore.

Although much of the barn-building was done by his own men, the building cost him over \$15,000.

His seed business includes custom-cleaning seed grain for neighbors as well as growing certified and regis-

tered seed himself on 200 to 250 acres of grain land.

His swine business provides further year-round work for another man, and a market for grain. The litters from about eight sows are supplemented by the weaner pigs that he buys.

Cropping program on the Anderson farm, which first of all requires an abundance of hay and pasture for the present herd of 35 cows, worked out to about 200 acres of hay (both grass silage and baled hay are saved), 200 or 250 acres of grain, 50 acres of rough pasture, 50 acres of improved pasture as well as 50 acres of bush. v



"Son, I wouldn't have any other brand on my tractor!"

Most men who've been farming for a long time have proved it to themselves.

Tough going, easy going, foul weather or fair, they know their Goodyear tractor tires can handle any job, anytime, anywhere.

And every year, more and more young farmers on the way up are proving to themselves that Goodyear is the tractor tire to buy.

If you're a young farmer (or one of long-standing), who still wants to be convinced, we suggest you do this. Ask a man who uses Goodyear Super Sure-Grips—right in your area—what he thinks of them, especially

when the going's tough.

We think we know what his answer will be, because we've talked to thousands of farmers who rely on Goodyear Super Sure-Grips.

That's why we're willing to let your neighbor be our salesman. Over the years, Super Sure-Grip users have proved to be our best salesmen.

Specify Goodyear Tires on all your farm equipment. And be sure you use Goodyear Truck Tires on your light truck. They're built stronger to stand up to truck work. Your Goodyear dealer will help you choose the right tire for your needs.



Jack Lalonde, of Arborfield, Sask., mounted a truck on a sleigh to haul it 1½ miles over snow to the highway.

[Aime Lalonde photo]

GOODYEAR

SUPER SURE-GRIP TRACTOR TIRES

The best motor oil your money can buy

Advanced

CUSTOM-MADE HAVOLINE

Reduce
Farm
Operating
Costs
with



Advanced Custom-Made Havoline is the finest oil superior refining can produce, *made better* by a Balanced Additive Formula. A *tougher-film* oil, so advanced in anti-wear qualities that it actually *wear-proofs* engines, keeps them clean, free from sludge, rust and bearing-eating acids. Use Advanced Custom-Made Havoline in all your Farm equipment. It's the best motor oil your money can buy.



IT PAYS TO FARM WITH

TEXACO Petroleum PRODUCTS

Manufactured and Distributed in Canada by McColl-Frontenac Oil Company Limited

Guarded Gold

Continued from page 12

maybe, or Montana, where a man could ride without havin' to listen to his brains sizzle. When he asked the K3 range boss for his time the first of June, nobody was either surprised or suspicious.

It so happened that Little-foot had not buried his gold sacks in Tusa's burrow, but in others not far from it. But less than a month after the rain, Tusa had to move. Snug in his burrow, one night he heard snuffing sounds up at the mouth. Then, muffled by a goodly depth of earth, came the scratchy sound of digging claws.

For a moment Tusa listened in no more than moderate fear. He had heard such noises before when some optimistic coyote had paused to dig a while in the vain hope that a foolish prairie dog would venture up to see what was the matter. But always the coyotes gave it up after scratching down a foot or two, still leaving him a good margin of safety. Thus both instinct and experience had taught Tusa to feel secure in the cool dark depths of the earth.

This time it was different. As the digging kept on, both he and his mate became very uneasy. When presently a strong, musky odor came filtering down to them through the dead air, their uneasiness suddenly became terror.

The hungry badger, already more than his length down into the burrow, paused a moment to listen eagerly to the gurgling chrr-chrr of the frightened prairie dogs as they scurried anxiously back and forth along the lowermost tunnel of their den. Then he started digging again, faster and more eagerly, yet with a patient persistence that spelled doom to the fat little rodents whose odor tingled his black nose so pleasantly.

Abruptly Tusa stopped running back and forth. At the farthest end of the tunnel he began to dig. The long claws at the ends of his short, muscular front legs quickly threw such a pile of loose dirt behind him that it threatened to block the tunnel.

Beyond it his mate chrr-ed in alarm and began to throw the loose dirt back in the faces of the crowding young ones. In youngsters of the wild, imita-

tion is a strong, natural instinct. Presently all five of the half-grown "pups" were digging too, throwing the loose dirt hit-or-miss into each other's faces as their mother scratched it into theirs, yet somehow managing to finally pile it up in the tunnel behind them.

Such a blockade would undoubtedly have served to save them if the approaching enemy had been a rattlesnake. But digging in to escape a badger is like trying to outswim a shark. If his persistence held out, sooner or later he could outdig them and enjoy his well-earned meal.

But, like Little-foot Fritz, Tusa was smart—and lucky. Smart in that he slanted his frantic tunneling upward toward surface, and lucky in that within a very few feet it cut into the deserted tunnel of a neighboring prairie-dog hole.

Tusa wasted no time. Chrr-ing excitedly, he scurried upward with a haste that left both his mate and their offspring straggling far behind. Once his nose reached moonlight he came out cautiously. For a brief instant he stood erect on his hindquarters eying sharply the mound of fresh earth a few yards away that marked where the badger had entered his own domicile. Then, as the rest of his family came crowding up behind him, he barked once shrilly and scurried across the flat to another burrow. Here, for once, he did not pause for a look around but dived headlong over the doughnut-like rim into the hole.

A rough end of the stub by which Little-foot Fritz had anchored one of his gold bags scraped hair from his belly, but Tusa did not even notice it. This burrow evidently had belonged to an old-time resident, for it went much deeper than usual. That suited Tusa exactly. He did not stop until he had reached the wide pocket at the farthest end of the lowermost tunnel. There, in a few moments, his family joined him, their fat, round bellies a-heave with panting.

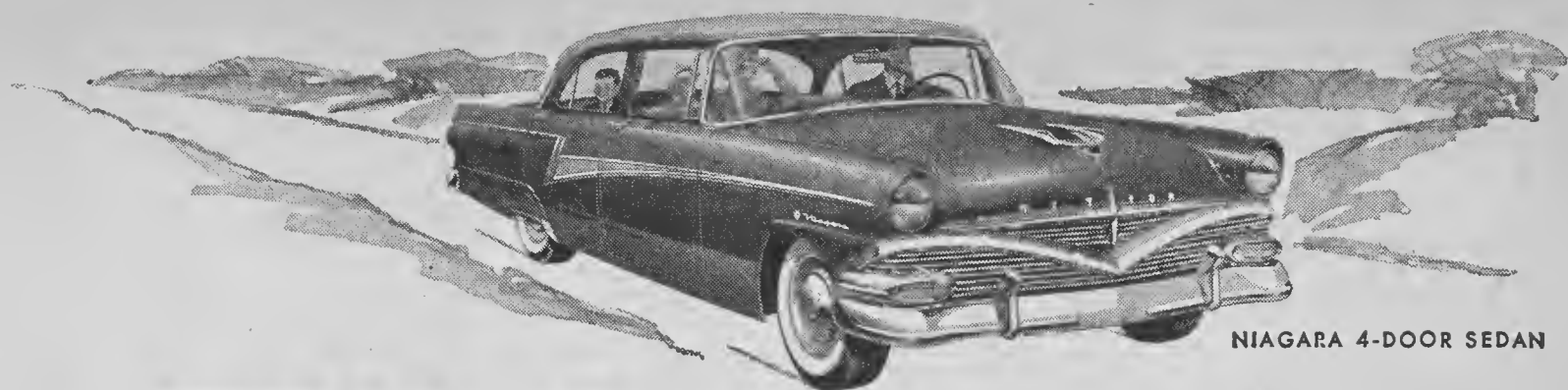
Not until long after sun-up did Tusa venture to the top again. He emerged furtively, half an inch at a time, finally standing up boldly on the rim for a long, careful "look-see" about. A nearby clump of half-withered greasewood annoyed him, for it partially obstructed his view.

Presently, when he felt sure there was nothing dangerous near, he



[D. Clemson photo]

This Scandinavian method of curing hay on stakes, seen in the Eagle River Valley, B.C., helps the wind to dry the hay, while keeping it off wet ground.



NIAGARA 4-DOOR SEDAN

Go *Meteor*. Now

and you'll always go Meteor!



6-PASSENGER NIAGARA RANCH WAGON

All the extra protection
of Safeguard Design!

Choice of 4 series: 23 models styled ahead
to meet the future.

Great V-8's: 173 Hp.—225 Hp. Built by the
world's V-8 leader.

Niagara and Meteor series now available
with new 6 cyl. engine.

There's an altogether new standard of quality built
into the new '56 Meteor.

You notice it when you slip behind the wheel and
look around at the finer appointments: the smart,
durable upholstery. You feel it in the smoother, steadier
ride of a '56 Meteor; the instantly responsive power
of its thrifty V-8 or 6 engine. Yet Meteor—a proud
member of Canada's foremost fine-car family—is priced
with the lowest.

It all adds up to today's greatest value, and your
best buy for the future. Driving a Meteor you can
always look forward to a higher trade-in allowance
when you again step ahead in a Meteor in the
years ahead.

See and drive Canada's number one value—the '56
Meteor—foremost in putting your safety first; fore-
most in style and performance. Visit your Mercury-
Lincoln-Meteor dealer this week!

BE MILES AHEAD WITH

'56 *Meteor*

A finer value from Ford of Canada

Drive Canada's greatest value at your



dealer's

NOW PRICED
WITH
THE LOWEST!

DAIRY FARMERS!

MILK PLANT OPERATORS!

SUPPORT AND COLLECT
THE JUNE SET-ASIDE.
WHAT HELPS YOUR SHIPPERS
HELPS YOUR BUSINESS.

SUPPORT THE JUNE
SET-ASIDE FOR ADVERTISING
AND PROMOTION TO
INCREASE YOUR
PRODUCT SALES

HERE'S HOW THE
1955 JUNE
SET-ASIDE
DOLLAR IS
BEING SPENT IN 1956

1 ADVERTISING & PROMOTION . 82.3¢

Daily Newspapers	25.8¢
Weekly Newspapers	6.0¢
Magazines	16.4¢
Trade Journals	5.6¢
Farm Journals	4.1¢
Radio and Television	8.0¢
Merchandising Services	7.8¢
Consumer Services	8.6¢

ADMINISTRATION & MEETINGS 11.5¢

SET-ASIDE PROMOTION 2.7¢

QUEBEC ADMINISTRATION . . 2.4¢

EDUCATION & RESEARCH . . . 1.1¢

Canada is among the high five nations of the world in per capita consumption of dairy foods. Your advertising and sales promotion campaigns over the last five years have done much to maintain and expand the home market for your dairy foods. To preserve and increase this market against the heavy and increasing promotional spending on all competitive foods and beverages your loyal support of the 1956 June Advertising Set-Aside is essential.



DAIRY FARMERS OF CANADA

409 HURON STREET, TORONTO, ONT.



dropped down to all fours, crept cautiously over to the greasewood and began to gnaw off its branches close to the ground.

The badger, disgusted with prairie-dog hunting after all his useless exertion digging out an empty burrow, had already quit the flat. Nor, in all the months that followed, did he return.

WITH that first big rain the drought had broken. By that strange miracle of endurance common to plants of a dry country, scattered sprigs of grass began again to spot the denuded flat with green, so that the prairie-dog family now found no need to migrate. The next spring some of those who had drifted came back, until a dozen or so of the several hundred deserted burrows were once more inhabited by the time Little-foot Fritz finally returned.

Tusa had found the little bulge of canvas in his new burrow annoying. Scratching dirt over it did no good, only increasing the hump around which he must bend going in and out of the hole. Finally he got down to business, scratched the dirt from around it, gnawed the tie strings in two and tried to drag the obstruction out of the hole entirely. But he found that it was too heavy for his small strength to budge. The clinking sound when he clawed and scratched at the bag aroused his curiosity. With sharp, chisel-like teeth he and his family gnawed round, ragged little holes in the canvas, reaching in with cautious, exploring paws.

For the young prairie dogs, gnawing at this strange object was like a new game is to human children. Soon they had it torn to shreds. As they played with them the gold coins became strewn and scattered all the way from the mouth of the burrow to its bottom. Two or three they carried outside. There, for a while they gleamed yellowly in the sun, then gradually dust covered them, leaving them no more noticeable than so many stones.

Thus for almost a year Tusa and his family went about the daily routine of life in their gold-studded burrow. The four surviving youngsters—a hawk had caught one—scattered to burrows of their own with the coming of spring, and in Tusa's deep, dark house a new litter was born.

How the big diamond-back rattlesnake happened to know that this would be a profitable time for a visit is uncertain. It is certain only that some seasonal instinct seems to tell the snakes just when to invade prairie-dog burrows so as to find plenty of succulent young rodents upon which to gorge themselves.

Tusa was coming up out of the burrow that morning half an hour after a hawk scare had driven him inside, when his sharp eyes caught a gleam of sun on the metallic-looking head of a rattlesnake just coming over the rim into the burrow. It was too late to dash out past it. Tusa gave a gurgling chrr of alarm and fled back into the dark depths. With an easy, flowing movement the diamond-back slithered into the hole and followed.

As when the badger's digging had threatened, terror seized upon Tusa and his mate. With the snake gliding down toward them along the one exit from their burrow, they were trapped.

For a moment they ran to and fro along the lower tunnel, chattering excitedly. Then all at once, a yard or two from the nest where the pups lay huddled, both Tusa and his mate began to dig.

As he sensed the nearness of young prairie-dog meat, the diamond-back picked up speed, his head raised, his tongue darting in and out.

Suddenly dirt flew in his face, hard flung and fast. Just ahead of him in the burrow, the claws of Tusa and his mate scratched away in an urgent fury of speed. Stung by the gravelly barrage, the snake paused, drew his head back a little. When the bombardment suddenly stopped and he started forward again, a rampart of earth blocked the way. Beyond it Tusa and his mate still scratched away, lengthening the blockade, packing it tighter and tighter in the tunnel. The diamond-back probed in vain for a way around it. Then after lying motionless for almost half an hour, waiting with the complete patience that is the gift of snakes, he gave it up, squirmed himself slowly around and started out of the burrow.

WHEN he came riding into the outskirts of the dog town this time, leading a pack horse, ready for his long-planned northward trek out of the country, Little-foot Fritz was surprised to see several prairie-dog sentinels perched on the edges of burrows, barking at him. It gave him an uneasy feeling, for he had figured this town was deserted. As he rode closer the dogs, with a last shrill chrrrr-rrr, dived almost in unison into the safety of their holes.

Little-foot Fritz raised himself in his stirrups, scanning the flat for the greasewood bush he had set up as a marker. When he could not spy it, his uneasiness increased and he swore under his breath. There were hundreds of those doughnut-like burrow mounds on the flat, and nothing to distinguish one from another, now that Tusa had cut down and scattered the greasewood bush.

As he rode, circling among the burrows, his eyes searching for some familiar sign whereby he could locate his five precious caches, Little-foot kept telling himself there was nothing to worry about. Dig into every damn hole on the flat if you have to. No hurry now, you fool. Nobody following you this time. Take it easy! Take it easy!

Yet inside of him uneasiness grew into something like a panic. He stepped down quickly from his horse and reached into an obviously unoccupied burrow. His groping fingers found nothing. Hurrying from hole to hole, presently he spied the dry, dead remnants of a greasewood branch. From the next hole he pulled out a heavy little canvas sack, moldy but intact. With shaking fingers he ripped it open, then laughed aloud with relief when he saw that the gold was still there. From the next burrow he tugged out another one. Now it was going to be easy.

He knelt beside the third burrow, noting that it, unlike the others, was inhabited. He reached inside. His groping fingers found no bulge of canvas, but they did bring out a single gold coin. He dropped it beside the two grey sacks on the burrow's rim

Inco metals at work in Canada

We ordinarily speak of automobile bumpers, grilles, hub caps and bright metal trim as being "chrome-plated". Actually, these parts are

plated with both nickel and chromium—a heavy coating of nickel covered with a thin layer of chromium. All the nickel used for plating auto

parts and other products of Canadian industry is Inco nickel—mined, milled, smelted and refined in Canada.

Almost two million pounds of Inco Nickel will help brighten Canadian cars in 1956 ... more jobs for Canadians

All the bright metal plating on Canadian cars is Inco nickel covered with a thin layer of chromium. Production of this nickel and the plating of metal parts for automobiles help make jobs for thousands of Canadian men and women.

1. Nickel-bearing ores are mined by Inco workmen. The ore is milled and smelted at Inco's plants near Sudbury, Ontario. Final refining is done at Inco's plant in Port Colborne, Ontario. About 18,000 men and women work for Inco in Canada.

2. Inco nickel is sold to Canadian companies where Canadian workmen produce anodes for the plating trade.
3. These anodes are used by other companies for electroplating bumpers, grilles, hub caps and other bright metal parts for cars—thus helping to provide employment for more Canadians.

This year, almost 2 million pounds of Inco nickel will be used for plating on Canadian cars. In addition, Inco nickel is used by Canadian industries to manufacture hundreds of useful products.



Write for a free copy
of the illustrated booklet
"The Romance of Nickel"

THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED

25 KING STREET WEST, TORONTO

Producer of Inco Nickel, Nickel Alloys, Copper, Cobalt, Tellurium, Selenium, Iron Ore and Platinum, Palladium and other Precious Metals.



A COMPLETE ADVERTISING PRODUCTION SERVICE

- CREATIVE ARTISTS
- COMMERCIAL PHOTOGRAPHERS
- PHOTO-ENGRAVERS
- ELECTROTYPERS
- WAX LINE ENGRAVERS
- OFFSET PLATES
- RUBBER, PARA-PLASTIC PLATES
- STEREOTYPERS
- NEWSPAPER FEATURES
- ADVERTISING SERVICES
- MOTION PICTURE AND TELEVISION PRODUCTION

rapid grip and **Batten** limited

TORONTO MONTREAL OTTAWA WINNIPEG



Accident costs *Set* automobile insurance rates

Automobile insurance rates are set in direct relation to the number and cost of accidents of Canadian drivers. Last year, for example, automobile insurance claims amounted to more than one hundred million dollars—a motor car was smashed every two minutes and someone was injured or killed every 12 minutes.

When the costs of automobile accidents decrease, so do automobile insurance rates. But, when the number and cost of accidents increase, then insurance rates increase too.

Drive carefully!



ALL CANADA INSURANCE FEDERATION

on behalf of more than 200 competing companies writing
Fire, Automobile and Casualty Insurance.

and reached in again, as far as his arm would go.

COMING back up from the depths, in an ill humor over his failure to kill meat, the big diamond-back struck promptly and hard. With a terrified yell Little-foot Fritz jerked his arm out. Fang-fastened to the back of his hand, there clung more than four feet of writhing rattlesnake!

White to the gills, he shook it loose. For a paralyzed moment he stood staring at the thin ragged rip the fangs had made. Then, as full realization came to him, he yanked the bandana from his neck, ripped back his sleeve and with trembling, left-handed awkwardness tried to bind it around his arm. At last, using his teeth to draw the knot, he got it tied.

Frantically he looked around for a stick with which to twist and tighten

it into a tourniquet. There on the round rim of the burrow sat two dirty grey bags with gold in them—but there was no stout stick in sight. The frail branch of dead greasewood broke at the first twist. By the time he thought of his gun, and with its barrel twisted the bandana tight, Little-foot's arm was already beginning to swell and he felt sick at his stomach.

In a panic of fear he ran for his horse. If he had approached quietly, at a walk, the bronc would not have been hard to catch. As it was, sensing the man's excitement, he spooked and shied away with rollers in his nose. Nor could Little-foot come any nearer to the pack horse.

For half an hour of sweating agony he followed the horses in ever widening circles, alternately cursing and easing up to them with all the skill he knew. But always they sidled away just before his hand could touch either rein or rope.

Finally, in a torment of bitter anger, he twisted the six-gun in his tourniquet around so as to point at the saddle horse as he trotted away, and emptied the gun at him. One of the bullets ripped across the saddle, but the horse was unhit.

Little-foot was several hundred yards away from the grey-earthed burrows where he had left the gold when finally a sick dizziness so overcame him that he had to lie down.

IT was the next day that the K3 line rider who had taken Little-foot's job picked up the horses, not far from La Cinta. The cowboy was little more than a kid, recently graduated from wrangling. Suspecting foul play because of the bullet rip across the saddle, he hurried into town to Sheriff Catlitt.

Back-tracking the two loose horses was a slow and laborious job. It was afternoon of the next day when Sheriff Catlitt, the line rider and a deputy sighted buzzards circling over a shallow draw at the edge of a grey, dusty flat. To get there their course carried them across the half-deserted prairie-dog town.

Out foraging, Tusa saw them coming, ran to his burrow and sat up on its rim, a fat, buff-grey, tail-twitching sentinel, sounding the alarm. At the round mouths of their burrows other prairie dogs joined the barking, but they all dived for safety while the riders were yet a good distance away.

As they rode into the "settlement," Sheriff Catlitt suddenly drew rein, peering down at the ground. The sign, to his experienced eyes, was plain, but what it might mean had him puzzled.

"Now, what in hell," he grunted, "would a man be diggin' into ol' prairie-dog holes for?"

Presently he found out. Standing in his stirrups, scanning the flat, his eyes caught the gleam of sunlight on gold coins yonder where Tusa and his mate had spilled them while trying to drag the bags off the doughnut rim of their burrow. Prairie dogs don't like anything that may obstruct their view of approaching danger.

Yonder, beyond the farthest abandoned rim of the prairie-dog town, Sheriff Catlitt and his companions found the body of the little-footed robber and murderer who had called himself smart—and lucky.

The Countrywoman

The Weaver

Summer on her green loom of twigs and stems wove this intricate scarf, white, gold and red; rich strands of snapdragon, threads of cornflower blue—draped 'round the brown shoulders of a garden bed.

See, here's a warp of mallow pink, a woof of pansy mauve; there an interlacing mass of cosmos, poppy. She finished her fine craft, on each edge, with a silk fringe of shining grass.

—ANNE MARRIOTT.

At the Close of School

IN a matter of a few weeks' time, school teachers will complete another term's duties. In each graded or ungraded school, the classroom teacher will sum up pupil enrollment, attendance and grade standing, sign the required report forms and send them off to the proper education authorities. Along with many thousands other such reports, these will be reviewed, summarized and put through statistical processes. The information will eventually appear in print, at a remote date, as the annual report of a Department of Education of a province of Canada.

There will be those who care enough to read, study and extract the content and meaning of such a report. A smaller number, closer to and more familiar with educational trends will be able to interpret progress or its lack long before the printed report comes from the printer's press.

The 1954 annual report of the Manitoba Department of Education contained this arresting statement: "The annual mortality from Grade VII on should be a matter of the deepest concern to us, as those who attain junior matriculation standing form our only source of professional trainees, and from these matriculants we must secure all our teachers, doctors, lawyers, nurses, clergymen, engineers, as well as a large proportion of our social and business leaders."

Before the closing day, when the teacher sets the school bell upon a shelf and turns the key on drawer or cupboard containing records of this and past years, there are questions which may well be asked and discussed by parents and other interested citizens, especially in regard to pupil "drop outs," grade failures and the number who will or should go on to high school. There fortunately seems to be a lively interest in education today in Canada. Thanks to good work done by Home and School study groups, and the fearless words of many well informed speakers and writers, we are becoming increasingly aware of certain weak spots: teacher shortage and the consequent employment of those not fully qualified to teach and the high proportion of "failures" in high school and university.

HOW far down the line does interest and concern about such matters extend? To your community and school district? What more can or might be done to encourage a teacher, parents and pupils to accept responsibility and avail themselves of existing resources? Evidence of public interest and support now might show beneficial results in the year that lies ahead.

There is strong competition today in business, industry, and the professions for university graduates. The demand far exceeds the available supply. Around about Easter holiday time there are frequent references in the newspapers to employment service "scouts" on tour across the provinces hunting out promising graduates and undergraduates to fill available posts.

What is regarded as a major problem of universities now and the cause of frequent complaint by those at the head, is that not a high enough percentage of the "bright intellects from high schools" go on to university. Though enrollment in univer-

Now is a fitting time to study the record of our school — to note its strong and weak points — and for the community to make plans for the year ahead

by AMY J. ROE

sities rises and classrooms are crowded, too many of the students lack the aptitude and drive to master the work required. The argument is now advanced that admission should be more restricted.

The case at high school level was neatly put by Dr. B. G. Whitmore of the University of Manitoba in a panel discussion recently on the relationship between the university and the high school. On points of teaching methods, subject matter and student attitude, he pointed out: "That in many cases the mental equipment of students was sufficient but the root cause of failure comes from lack of knowledge in *how to get down to work*, in other words a *low quality of approach*. . . . It is too late by the time a student is 18 to teach him new mental abilities, if his mind has lain rusty for the past six years."

ALL of which brings us around and back to the importance of good teaching methods by well trained teachers; proper conditions for work and proper discipline in the school and in the home. These in turn depend in some measure upon the acceptance of responsibility of parents and students of exerting their best effort for a child's advancement through the elementary grades and for certain sacrifices to enable him to continue on to high school.

Bright children capable of hard work are soon noted by an observant teacher. Sometimes their restiveness leads them into idle mischief and through boredom into fruitless and time-consuming activities and they fail to establish good habits of work. Understanding and encouragement should be given such students by teacher, parents and the community. Has there been any wastage of promising human material in your school or community?

This is a good time to take stock of what is on hand now and plan for the future.

In many cases in the rural one-room schools, older pupils in the three higher grades feel out of place, bored or even awkward in associating with small children. Their social interest in school is limited and lacking incentive or example they all too readily tend to swell the number of "drop outs." "If," as one experienced school inspector expressed it, "provision were made in a nearby center for a junior high school for grades seven, eight and nine, pupils from such schools, a much larger number of promising rural students would be encouraged to complete high school standing."

In the larger school unit, where a town and one or more rural municipalities combine and provide a collegiate or secondary school unit for country and town pupils, wider opportunities are opened for rural students to continue further formal education. In one such school unit, the number of outside-the-town students has grown steadily from 45 in 1947-48, the first year of operation, to 195 in 1955-56. The sense of pride shared alike by pupils and parents in knowing "that is our high school" plays an important part in their making full use of facilities offered and benefit by optional courses in: shops, commercial, home economics, etc.

The guidance counselling program presented in many high schools today aids a student in discovering interests best suited to his or her talents, offers an aim and a fresh incentive for further study and work. Talks given by a local or visiting doctor, banker, social worker, nurse, editor, merchant or tradesman bring the activities of the world outside the classroom into the student's range of understanding and may help many to make a choice of their life's occupation.

Keeping the story of what others, who completed courses have done or are doing is another means of offering encouragement. The students of Neepawa Collegiate, Manitoba, through an elected committee publish a quarterly school journal, written and managed by the students. The paper carries a regular and popular feature—a letter from ex-student graduates from the school, telling where they are or have been, what kind of work they are doing and the opportunities they have in the way of further studies, travel, meeting important people, or scholarships won.



A scene familiar to many—springtime activity on the playground of the one-room rural school.

A Country Parson



by JOHN G. FERRY

In the predominately rural Saskatchewan United Church Conference, Reverend Frank Myers of Maymont has been accorded a place of honor and respect. He is a man who understands farming and its problems, people and life in a rural community. Churchmen and fellow ministers regard him as symbolic of the ideal "prairie parson"



INTELLIGENT, scientific methods in agriculture, and the Christian conception of stewardship are one and the same thing.

The farmer who makes the most intelligent use of the land, in order that its fertility will be preserved, and its productivity maintained, or increased, is not only being a good farmer from the scientific point of view, he is being a good Christian as well—taking proper care of those resources which God has placed at his disposal.

Agricultural scientists, authorities, and progressive farmers, in seeking to impress upon the farming communities of our nation the necessity of sound agricultural practice, have a powerful ally in the rural church, and in those Christian ministers of all denominations who have found in the rural pastorate, and amongst rural people, a challenging and satisfying field of labor.

The Saskatchewan Conference of the United Church of Canada, in spite of the tremendous problems with which it is faced through trends toward urbanization, at its last Conference recognized the vital importance of the rural church and the rural ministry by electing as its president a rural minister whom they felt to be widely representative of the rural church—a man of his people, as well as a man of God. He is one who understands agriculture and the problems of the farming community in the light of the Gospel that he carries into their midst.

REV. FRANK MYERS of Maymont, Saskatchewan, has rightfully won a place of honor and respect in western Canada's largest rural church, and in its most predominantly rural Conference. To rural churchmen and fellow ministers he has become somewhat symbolic of the ideal "Prairie Parson."

He is unpretentious in appearance, earthy and approachable at all times—the kind of man who would be completely at ease in the blacksmith shop, or the corner store. He has proven himself to be a true son of the soil, and a devoted servant of his people; although there is probably no other man west of the Great Lakes who looks less like a minister than he does.

In fact, when Rev. Frank Myers first went to Maymont some 17 years ago—the charge he still holds—the first man to meet him was the local elevator agent. Shortly afterward, seeing one of the leading ladies of the con-

gregation the agent said, "Did you hear that the new preacher has just arrived?"

"No!" said the lady excitedly. "Tell me, what does he look like?"

Her informant, taking his pipe from his mouth, grinned broadly and replied in a casual drawl, "Well, I'll tell you, if you should take a gun and go out shootin' fellas that looked like preachers, he's the last guy in the world you'd shoot at."

FRANK'S father, a butcher by trade, was a lay preacher in the Presbyterian Church before Union. He served in the early years at Success, and Glenewen.

"It was at Glenewen," said Rev. Myers, "while attending one of my father's services, that I felt a definite 'Call' to the ministry. I was about 12 years old." Several years later he entered St. Andrew's College in Saskatoon. "My father's last year in college was my first year," he informed me. "We had the unique distinction of rooming together."

Following his ordination, the Rev. Frank Myers volunteered for service at Pierceland in northern Saskatchewan. "At that time," he remarked drolly, "Pierceland was a pioneer community with about 99.44 per cent of the people on relief." But behind the drolery there obviously were many memories of experiences of hardships shared with his people.

He covered a vast area with a team of horses and that commonplace depression vehicle the "Bennett wagon;" an ingenious invention of farmers that combined the smoothness of car with the cheapness of a horsedrawn vehicle. The horses had to eat in any case, and few people had enough money for gasoline.

"I ate wherever I landed at mealtime," said Frank, "and slept where bedtime found me."

One morning, while on such an excursion, he came out to hitch up his team and discovered a flat tire on his "Bennett wagon." He was in the act of fixing it when several young people drove up. "I spent the day with them," he grinned, "and didn't get away until the next day about 10:00 a.m." Then he added, "One of those young people was Ruby Imrie, of Adanac, who is now my wife. I have never complained about flat tires since—you never know what one may bring you."

In July of 1937, Mr. Myers arrived at Maymont, and he has been there

ever since. During his ministry there he has wholeheartedly associated himself with the life of his people, and if his methods sometimes appear a little unorthodox, they are nonetheless effective.

For instance, Saturday afternoon and evening finds most rural communities filled to overflowing with people in town to do their weekly shopping. Mr. Myers, taking advantage of the opportunity, posts himself on main street, and thus visits weekly with every farm family in the district for miles around.

One of his fellow ministers, commenting on Mr. Myers' work, suggested that his long pastorate was one of the main reasons for his great effectiveness. "There are not so many farms that do not change occupants in the course of 20 years," says his friend, "and he actually knows the people much better than they know each other." Be this as it may, this prairie shepherd really knows his flock.

He calls them all by name, and because he understands their individual problems, from the details of farming to those of family relationships, he is an ever-welcome guest, under any and all circumstances. This habit affords many an opportunity for intimate pastoral counselling in a farm kitchen, or squatted on a milk stool in the barn. Rural people have a natural reserve in manner and speech. Completely at ease in their homes they are more inclined to reveal their innermost thoughts and feelings. They seldom come to a minister's study to talk over their problems, but they welcome those opportunities afforded them by this prairie parson. He has gained a vast fund of pastoral experience and insight over the years. But of these things Rev. Myers does not talk, characteristically dismissing the point when raised. "That would be betraying the confidences of my people."

HE did relate one experience which he felt was not confidential and which gives insight into both his sense of humor, and his appeal to men of all manners and conditions. One night as he drove into town rather late he noticed a local farmer the worse for having been on the bottle. "I stopped and talked to him," said Mr. Myers, "and he asked me to drive him home, which I did. Upon our arrival," he laughed, "the man wanted me to go into the house with him so that his wife could see he had been out in 'good' company."

An added feature of his effective pastoral methods is that, he works in and through farmers' organizations. Experiences give him the opportunity to bear witness to that which is closest to his heart, and which is vitally related to rural life, and to the assurance of a Christian community, the one supplementing, and giving inspiration and the opportunity of practical expression through the other. "Ever since my coming here," he says, "I have had the privilege and responsibility of speaking at the annual Mayfield and Douglas Agricultural Society banquet, and also of speaking to their grain clubs."

HIS effectiveness in this field of activity will be better appreciated when we understand something of his thoughts of the place of the pastor in the rural community, and the relationship of the farmer to the wider community and to God.

"The rural minister," he says, "must never forget that he is an ambassador of Christ, as Paul was in all ways and all places an ambassador of Christ. He must be at the heart of all things in the community and at the head of none."

He has a high regard for the contribution rural people have to make to the life of our world. "Their contribution must be in more than food," he says, "it must also be in men and women of character."

He believes the church can do much for rural life by its emphasis on Christian stewardship—the idea that a man's land is a trust from God, and that he must answer to God for his stewardship. This, Mr. Myers points out, is summed up in what Walter C. Lowermilk has called "the Eleventh Commandment."

"Thou shalt inherit the whole earth as a faithful steward, conserving its resources and productivity from generation to generation. Thou shalt protect thy fields from soil erosion and thy hills from overgrazing by thy herds, so that thy descendants may have abundance forever. If any shall fail in this stewardship of the land, his fertile fields shall become sterile stones and gullies, and his descendants shall decrease and live in poverty, or vanish from the face of the earth."

Thus this staunch parson labors, giving generously of his time and talents to translate the teachings of the gospel, and to relate them in meaningful terms to the practical and spiritual life of men and women in a rural community.

The Bride and Her Wedding

by PHYLLIS A. THOMSON



TRADITIONALLY June is the month of brides. If you are one of those starry-eyed girls soon to become a "Mrs." there are many exciting and wonderful plans to be made. Your head may be in the clouds but your feet had better be on the ground, too. The perfect wedding doesn't just happen. It is planned to the last detail.

Your first responsibility as a bride is to be your sweetest and most considerate self all through your wedding-planning days. As soon as you proudly display a sparkling diamond on the third finger of your left hand, these exciting times begin. First of all you will want all your friends to know about your engagement, so plan to have a small party—a dinner perhaps—for close friends or relatives. Give an account to your local newspaper so you can have a record of it for your scrapbook.

You and your parents will want to hold a family council to decide the type of wedding. In some rural communities a girl feels that everyone in the vicinity has helped bring her up and she plans a large church wedding to include friends and neighbors. The bride has to consider the wishes of the groom and her parents in regard to the date, preparations and the expenses involved.

It is inconsiderate—and poor taste—for a bride to plan a lavish wedding if her family can't afford it or if she really needs the money to establish her new home. You can have a lovely wedding with simple church decorations, an inexpensive gown, only one attendant and a small reception. Weddings held at 3:30 or 4:00 p.m. entail less expense because refreshments may be limited to tea-time food.

One of the very first things to arrange is the matter of invitations and

announcements. Your fiance and his mother will furnish a list of their friends to include in the guest list you and your family are compiling. Invitations should be sent out three weeks before the wedding day. Announcements go to those who do not receive an invitation and should be ready for mailing on the day after the big event. Invitations for an informal wedding are written by the bride herself, on folded white stationery of ordinary size and the formality depends entirely upon how well she knows the person to whom it is going. The date and time of the wedding, the place, the church and the reception are the main topics.

Formal wedding invitations follow a definite pattern. Regardless of type or size, they are always mailed in two envelopes, the outside one addressed to husband and wife and the inner one addressed with just the name, no address.

Uppermost in the mind of the bride is the question of what the wedding party will wear. For a formal wedding, the bride may choose a floor-length white or pastel gown, with or without a train. For less formal weddings, ballerina or waltz-length gowns are popular. A delicate headdress and veil of silk illusion complete the bride's ensemble. At a small informal wedding, a street-length dress or suit is quite proper. Pale pastels or white are most appropriate for this special day.

If the bride wears a full-length gown, then the bridesmaids' dresses are floor-length too. Similarly, if she wears a dress or suit, her attendant should wear a harmonizing costume. The bride's attendants furnish the colorful background for a wedding and should be as pretty as a picture. Their costumes should be made exactly alike,

(Please turn to page 55)

... don't turn an old-fashioned crank

MAKE ICE CREAM THE MODERN WAY—Electrically!

SILEX-HANDYHOT FREEZERS

Real homemade ice cream the modern way in minutes—and electricity does all the work!

4- and 6-quart capacities—ideal for families.

Suggested retail prices:
\$34.95 and \$39.95

Ask your dealer about the Silex offer of a free ice cream scoop with any of these freezers

THIS OFFER EXPIRES JULY 31, 1956

You're sure it's RIGHT when it's SILEX—the name that stands for the finest in modern housewares. See all the famous Silex products at your nearest hardware, department or electrical store.

THE SILEX CO. LTD.
Iberville, Que.

1-QUART
Suggested retail price: **\$24.95**

Write for FREE Ice Cream Recipe Booklet to The SILEX Co. Ltd., Iberville, Que., Dept. A.

SILEX-ENTERPRISE FREEZER
Fits any modern refrigerator. Operates automatically without salt or ice.

1½-quarts—suggested retail price: **\$24.95**
1 quart size: **\$22.95**

ALL ARE MEMBERS OF THE FAMOUS

SILEX

FAMILY OF FINE APPLIANCES



Young Mother a Victim of SCIATIC PAIN

You, or one of your loved ones, may suffer from the misery of sharp, sciatic pain. If so, you will find encouragement in this message from Mrs. Roger Loiselle of 534 Boulevard Ste. Madeleine, Cap de la Madeleine, Quebec: "I am a young mother of 25 with three children. For over a year I was suffering from constant sciatic pain in my hips and thigh, and in my leg. Fortunately I heard about T-R-C's. The first dose helped me get quick, welcome relief from an acute pain from which I had been suffering for several days. Since I began taking T-R-C's I have become my happy, cheerful self once more. I cannot speak too highly of the relief I have had thanks to T-R-C's." Templeton's T-R-C's can bring you the same effective relief from rheumatic, arthritic or sciatic pain. Try Templeton's T-R-C's today—only 79¢ and \$1.50 at your druggist's.

T-40
FREE: Blue Diet Sheet. Write to: Templetons Ltd., 56 Colborne St., Toronto



"Love is not automatically everything! White clothes don't happen 'automatically'—you still need Mrs. Stewart's Bluing for sparkling whiteness."

Always something to spoil the fun! It's true, tho, that Mrs. Stewart's liquid is the quick, easy to use, modern way to really snowy white clothes—in any washer. Try it next washday.

When Writing to Advertisers Please Mention The Guide.



At teething time baby very often suffers the added discomfort of constipation. Try Steedman's Powders, the standby of mothers for over 100 years, they act safely and effectively as a gentle laxative.

FREE BOOKLET: "Hints to Mothers" on request. Write to the distributors: Laurentian Agencies, Dept. J-1, St. Jean Baptiste St., Montreal.

Give STEEDMAN'S From Teething to Teens POWDERS

Look for the double EE symbol on the package.

Save time... Save work!

with the finest household appliances from General Electric



Swivel-top Cleaner. Home cleaning the easy way.

Frypan. Fries, braises, stews, grills, bakes.

Portable Mixer. Powerful, light—for all mixing jobs.

Steam Iron. Flick the button for steam or dry.

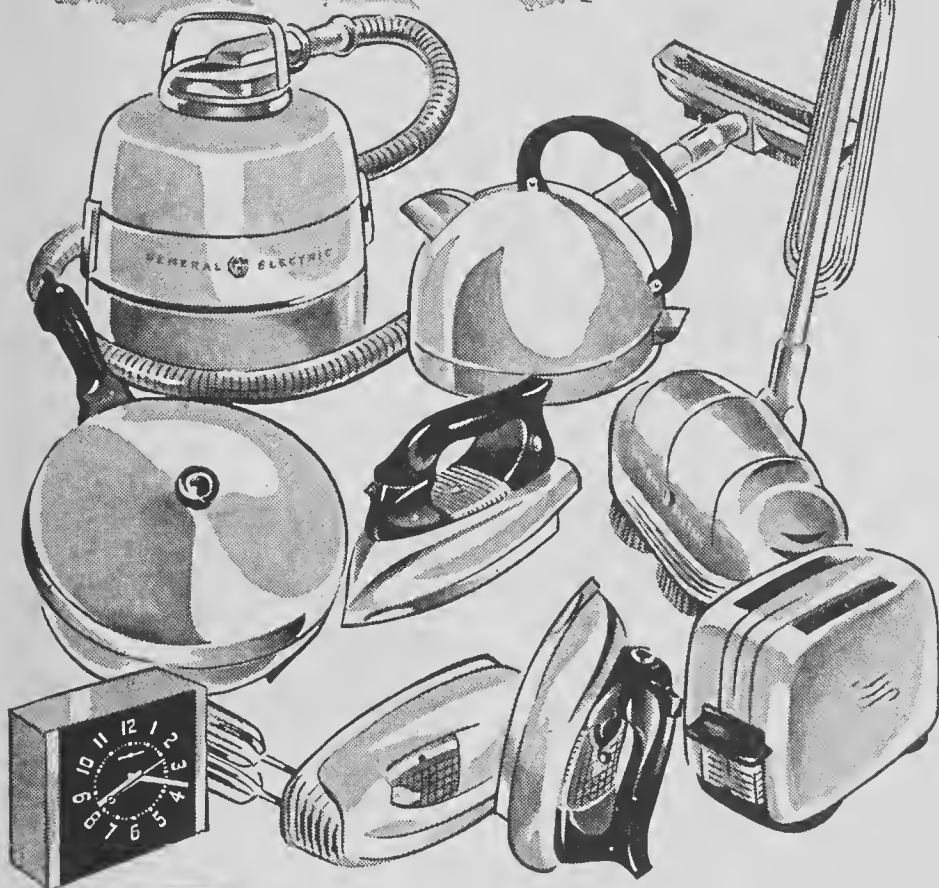
Floor Polisher. You just guide—it does the work.

Automatic Toaster. Toast to your taste every time.

Featherweight Iron. Cuts ironing time by one-third.

Electric Kettle. Boils two to ten cups in a jiffy.

Electric Clocks. Handsome, accurate—for every room.



GENERAL ELECTRIC APPLIANCES

CANADIAN GENERAL ELECTRIC COMPANY LIMITED

Starting with Bread

With a little ingenuity, leftover bread can be used to advantage in preparing tasty and inexpensive dishes



A tasty dish, carrot ring filled with green beans and served with bacon strips.

BREAD, the so-called staff of life, is a staple food in practically every home. Yet bread holds the unenviable distinction of being one of the foods most frequently wasted; crusts are cut off sandwiches and discarded, slices dry out or the ends of a loaf go stale and are thrown away. There are so many good ways to use leftover bread that waste is entirely unnecessary.

Slightly dry bread will make excellent toast—even better than bread that is too fresh. Toast slices cut into pointed shapes make an attractive garnish for creamed dishes. Toast tulips may be used in place of patty shells for creamed chicken or meats. They are made by cutting a loaf into one-quarter-inch slices, removing the crusts and brushing both sides lightly with butter. Press the slices into muffin tins and brown in a moderate oven of 350° F.

Soups may be garnished with croutons which are simply toasted cubes of bread heated in melted butter. Dry bread may be rolled, grated or put through a food chopper to form fine crumbs. Bread crumbs should be kept in a well-ventilated jar. Use crumbs for meat, poultry or other foods that are dipped in egg and crumbs for frying. Fine crumbs added to cookie or muffin mixtures give a delicious flavor.

Meat loaf, hamburgers, hash and croquettes can be extended with fine, dry or soft crumbs to make economical dishes. To make soft crumbs, tear slices of bread into small pieces with fingers or fork. Bread stuffing for poultry and for meats such as beef rolls, veal birds, pork chops, pork shoulders or frankfurters are old and familiar methods but still as good as ever.

A well-made bread pudding is an economical treat. It takes slow, careful cooking and if properly cooked is a tasty dessert. Raisin bread or other types may be used and any one of a long list of flavors: dried or canned fruit or a tangy fruit sauce may be

added to give a "dessert with a difference."

Crunchy French Toast

2 eggs	6 slices bread
½ tsp. salt	2 T. bacon
¼ c. milk	drippings
½ tsp. cinnamon	

Beat eggs slightly, add salt, milk and cinnamon. Mix with a fork. Dip slices of bread in liquid. Pan-fry French toast slices in bacon drippings until golden brown. Serve hot with jelly or maple syrup.

Fruit Bread Stuffing

6 c. bread cubes	⅓ c. butter
½ c. dried prunes	2 T. brown sugar
½ c. dried apricots	¼ tsp. cinnamon
1 c. hot water	

Toast bread cubes in moderate oven (350° F.) until golden brown. Soak dried fruit in hot water until soft. Drain and save liquid. Cut fruit in small pieces. Combine with bread cubes. Stir in brown sugar and cinnamon. Toss together lightly with melted butter. Add enough water to liquid from dried fruit to measure 1 c. Pour over bread cubes. Put in 8" x 8" pan. Bake in moderate oven (350° F.) 45 minutes. Cut in squares and serve with veal roll. Serve topped with apricot halves if desired.

King's Pudding

9 slices dry bread	½ tsp. almond
1½ c. milk	extract
2 egg yolks	Jelly or jam
¼ c. sugar	2 egg whites
¼ tsp. salt	¼ c. sugar

Remove crusts from bread. Cut each slice in half lengthwise; arrange in single layer in large shallow pan. Beat milk, egg yolks, ¼ c. sugar, salt and almond extract in bowl; pour over bread; let stand 10 minutes to absorb liquid. Spread a thin layer of jelly on 12 slices for filling; put all slices together to make 6 triple-decker sandwiches; place slightly separated, in buttered baking pan 9" x 9" x 2"; bake in hot oven (400° F.) 25 minutes. Remove puddings from oven, leaving heat on; frost tops with meringue of egg whites beaten stiff with ¼ c. sugar; mark two diagonal grooves across each with knife. Return to oven; bake 5 to 8 minutes longer or until meringue is golden brown. To serve, spoon additional jelly or jam in diagonal grooves.

(Please turn to page 54)

Date Desserts

Prepared and served in new and interesting ways, dates add a special touch to meals and desserts

DATES add flavor and color to a favorite dessert or salad. When included in sauces, quick breads, puddings or tarts, they can be depended upon to give meals a lift.

There are two types of dates available—the large, plump table or eating dates which are usually packaged in attractive containers, and the smaller, “cooking” dates, pressed and packed in “cello” or polyethylene wrappers.

Dates are nutritious and relatively inexpensive. They contain a ready supply of fruit sugar for quick energy. Eaten raw, they make an excellent between-meal snack for children—an ideal substitute for candy.

Dates can transform an ordinary dessert or meal into a special treat. Chopped dates may be included in a basic sweet souffle, plain muffins, tea biscuits or cake batter. Old standbys such as date jumbles and layer cake with rich date filling are favorite items. Dates make an excellent ingredient for salads, particularly before greens can be picked from the garden. Stuffed with cream cheese, dates provide a tasty, unusual accompaniment to a fruit or vegetable salad plate. As a confection, dates filled with creamy fondant are delicious. And for a surprise children will love, tuck a honey date bar or golden date square into their school lunch box.

If the dates you have on hand have dried out slightly, it is a simple trick to restore their natural moistness. Place the dates in a single layer on a cookie sheet and warm thoroughly in a 250° F. oven. The heat will start the juice in the dates flowing and the fruit will again be fresh-tasting.

Orange and Date Salad

- | | |
|----------------------|-----------------------|
| Head of lettuce | 3 T. chopped |
| 36 orange segments | dates |
| 2 T. chopped walnuts | 6 maraschino cherries |

Arrange beds of lettuce on 6 plates. Put 6 orange segments on each, like spokes of a wheel. Mix dates and walnuts and put in center as hub. Set a cherry on mixture.

Lemon Date Sauce

- | | |
|--------------------------|--------------------|
| 1 T. cornstarch | 1 c. boiling water |
| ½ c. sugar | 2 T. butter |
| 1 tsp. grated lemon peel | Salt |
| 2 T. lemon juice | ½ c. chopped dates |

Combine cornstarch, sugar, lemon peel, lemon juice, chopped dates. Add water slowly, stirring constantly. Boil 5 minutes. Remove from heat. Add butter. Season to taste with salt. Serves 4.

Date Mousse

- | | |
|--------------------|-------------|
| ½ lb. dates | ½ tsp. salt |
| 1 c. orange juice | 1 c. cream, |
| 1 tsp. orange rind | whipped |
| 4 egg yolks | |

Cook pitted dates with ½ c. water over a low heat for 10 minutes. Rub through coarse sieve. Add orange juice and rind, beaten egg yolks and salt. Stir over boiling water until egg yolks thicken, about 5 minutes. Cool. Fold in whipped cream and freeze. Serves 8 to 12.

Bombardy Pastries

- | | |
|--------------------------|------------------------|
| 1 c. pitted dates | 1 c. sugar |
| 1 egg, beaten separately | 1 lemon-rind and juice |

Mix together and spread between layers of rich pie paste and bake golden brown.

Date and Nut Bread

- | | |
|----------------|----------------------|
| 1 egg | 4 tsp. baking powder |
| ¼ c. sugar | ½ tsp. salt |
| ½ c. dates | 1 c. milk |
| ½ c. nut meats | |
| 2 c. flour | |

Beat egg and add sugar. Add nut meats broken and dates cut in pieces. Sift dry ingredients together and add alternately with milk to first mixture. Turn into greased pan. Bake at 350° F. for 45 minutes.

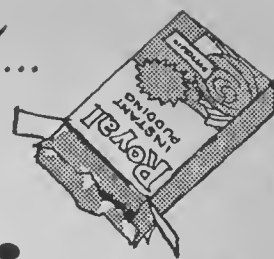
Golden Date Squares

- | | |
|---------------------|------------------------|
| 1 c. chopped dates | 1 c. all-purpose flour |
| 1 c. water | 1 tsp. baking powder |
| ½ c. sugar | ¼ tsp. salt |
| ½ c. butter | 1 c. minute oats |
| ½ c. chopped pecans | Heavy cream, whipped |
| 1 c. brown sugar | |

Combine dates, water and sugar in saucepan and cook over medium heat until thick. Cool and add pecans. Cream butter until soft, gradually cream in brown sugar. Sift together flour, baking

Super-luscious... Melty-rich...

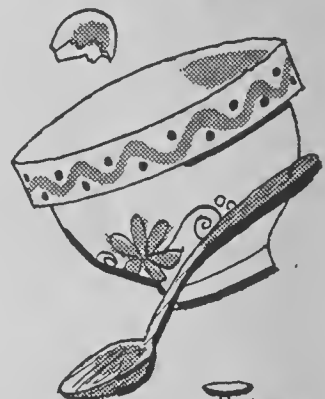
Butterscotch Pudding Cake



Make it with **MAGIC** and serve it with pride!

Your guests will bless you for each fluffy forkful of this delightful Magic cake! It will be fun to see the family go through a whole cake at a sitting and call for an encore! It's *your own baking* that's clicking!

And dependable Magic Baking Powder is your best assurance of success in all your baking. Four generations of Canadian housewives have proved it! Plan to serve this deliciously different Magic cake this week!



BUTTERSCOTCH-PUDDING CAKE

- | | |
|---|-------------------------------|
| 2 c. sifted pastry flour | 10 tbsps. butter or margarine |
| or 1 ¾ c. sifted all-purpose flour | ½ c. fine granulated sugar |
| 2 ½ tps. Magic Baking Powder | 1 egg |
| ½ tsp. salt | 2 egg yolks |
| 1 pkg. Royal Instant Butterscotch Pudding | ¾ c. milk |
| | 1 tsp. vanilla |

Grease two 8-inch round layer-cake pans and line bottoms with greased paper. Preheat oven to 350° (moderate). Sift flour, Magic Baking Powder, salt and butterscotch pudding together 3 times. Cream butter or margarine; gradually blend in sugar. Beat the egg and egg yolks together until thick and light; add to creamed mixture part at a time; beat well after each addition. Measure milk and add vanilla. Add flour mixture to creamed mixture about a quarter at a time, alternating with 3 additions of milk; combine lightly after each addition. Turn into prepared pans. Bake in preheated oven about 35 mins. Put cold cakes together with part of Fluffy Vanilla Frosting; frost cake all over with remaining frosting; sprinkle top with cocoa.

FLUFFY VANILLA FROSTING

- | | |
|----------------------------|----------------------------|
| 2 egg whites | 2 tps. vanilla |
| 2 c. fine granulated sugar | 1 tsp. Magic Baking Powder |
| ½ c. cold water | |

In top of double boiler combine unbeaten egg whites, sugar and cold water. Place over boiling water and cook, beating constantly with rotary beater, until frosting stands in peaks—about 12 minutes. Remove from heat; beat in vanilla and Magic Baking Powder. Spread immediately.



Costs less than 1¢ per average baking.



Top golden date squares with rich whipped cream for a tempting dinner dessert.



At teething time baby very often suffers the added discomfort of constipation. Try Steedman's Powders, the standby of mothers for over 100 years, they act safely and effectively as a gentle laxative. FREE BOOKLET: "Hints to Mothers," on request. Write to the distributors: Laurentian Agencies Ltd., Dept. J-1, 429 St. Jean Baptiste St., Montreal.

Give STEEDMAN'S
From Teething to Teens **POWDERS**

Look for the double EE symbol on the package.



THE VASELINE BRAND IS YOUR GUARANTEE OF PURITY

Promotes Healing

THE FIRST AID KIT IN A JAR

powder and salt and gradually add to creamed mixture. Add oats and mix until crumbly. Pat half of crumb mixture in 8" x 8" pan. Top with date mixture and spread remaining crumbs over top. Bake in slow oven (325° F.) about 45 minutes. Cool, cut in squares and serve topped with whipped cream. (Cream may be flavored with vanilla and cinnamon.)

Stuffed Dates

Remove stones from dates and replace with fondant and 1 whole nut meat to each fruit.

Fondant:

2½ c. sugar ¼ tsp. cream of tartar
1 c. water

Combine ingredients. Heat to boiling point, stirring until sugar is dissolved. Continue boiling, brushing syrup from sides of pan until temperature reaches 238° F., or until small amount of syrup dropped into cold water forms soft ball. Remove to shallow dish. When lukewarm, stir until white and creamy. Add any desired flavoring. Cool. Fill dates with fondant.

Date Honey Bars

½ c. shortening ½ tsp. salt
1 c. honey 1 c. chopped dates
1 tsp. vanilla
3 eggs 1 c. chopped nuts
1¼ c. sifted flour Confectioner's sugar
1 tsp. baking powder

Blend shortening, honey and vanilla until creamy. Beat in eggs, one at a time. Sift dry ingredients into egg mixture. Blend. Add nuts and dates and stir just enough to distribute evenly. Spread in greased 9" x 12" pan. Bake in moderate oven (350° F.) until golden brown, 30 to 35 minutes. Cool. Cut into bars and roll in confectioner's sugar. Yield: 3 dozen 1" x 3" bars. ✓

Starting with Bread

Continued from page 52

Carrot Ring

3 c. soft bread crumbs 3 T. chopped, toasted buttered almonds
1½ c. milk 1½ tsp. salt
5 eggs, beaten ¼ tsp. pepper
2 c. mashed cooked carrots ¼ tsp. marjoram
½ c. celery

Combine bread crumbs, milk, beaten eggs, carrots, celery, almonds, salt, pepper and marjoram. Pour into a well-greased 1-qt. mold and set in a shallow pan of hot water. Bake in moderate oven (350° F.) for 1 hour. Let stand 5 minutes before loosening around edges and unmolding on a warm serving platter. Fill center of ring with hot buttered cut green peas.

Stuffed Spareribs with Fruit Dressing

2 sides spareribs ½ tsp. sage
3 c. stale bread crumbs ½ c. minced onion
½ c. chopped apple ¼ tsp. thyme
½ c. fruit cocktail ¼ c. melted butter
1 c. chopped fruit cocktail
celery Slices of lemon and orange
1 tsp. salt

Combine crumbs, apple, fruit cocktail, celery, onion, salt, sage, thyme, melted butter and fruit juice. Mix thoroughly. Salt ribs. Place dressing on one side of ribs and cover with the other side. Skewer together. Brown ribs in hot oven (450° F.) for 10 minutes. Lower heat to moderate oven (350° F.) and roast for 1 hour. Place lemon slices on top of ribs and bake 10 minutes. Serve with lemon-orange sauce.

Lemon-Orange Sauce

1 T. butter 1 c. water
1 T. cornstarch ½ c. orange juice
¼ tsp. nutmeg 2 T. lemon juice
2 T. sugar 2 tsp. lemon rind

Melt butter. Add cornstarch, sugar and nutmeg. Stir until smooth. Add liquids a little at a time, stirring until smooth after each addition. Add lemon rind. Bring to boil and cook until mixture is clear and thick.

Party Mock-Angel Cakes

1 tin sweetened condensed milk 1 loaf white bread
1 c. shredded coconut ½ c. chopped nut meats

Cut bread in strips, cubes or blocks with all crusts removed. Dip each piece in sweetened condensed milk, then in coconut and nuts. Place on a greased pan and brown carefully in a moderately hot oven (375° F.). Turn to brown evenly. Remove from pan with a greased spatula. Cool before serving. Number of small cakes will depend on size and shape of bread pieces. Average 24-36 pieces. Makes ideal tea-time or party snack. ✓

* * *

An easy Russian dressing is made by simmering together a medium onion, green pepper and tomato until tender, drain, rub through sieve and chill. Stir into a cup of mayonnaise or boiled salad dressing and let stand at least 1 hour. ✓

To use mild cheese for sharp add ½ tsp. dry mustard, ½ tsp. pepper, 1 tsp. Worcestershire sauce for each cup of cheese used. ✓

Red cabbage will keep its color by the addition of several grapefruit sections while cooking even as it adds to the flavor. ✓

3 different Cheese-flavored Treats from One Basic Dough!

NEEDS NO REFRIGERATION!



Clever one-oven tricks with FLEISCHMANN'S YEAST!

One dough—one oven—three kinds of flavor-thrilled baking! It's easy to be a whiz when you start with Fleischmann's Active Dry Yeast. Risings so sure, so fast—results so light and appetizing! If you bake at home, be sure you have plenty of Fleischmann's on hand.

BASIC CHEESE DOUGH

Scald

1½ cups milk
3 tablespoons granulated sugar
2 teaspoons salt
3 tablespoons shortening

Remove from heat and cool to lukewarm.

In the meantime, measure into a large bowl

½ cup lukewarm water
1 teaspoon granulated sugar

and stir until sugar is dissolved. Sprinkle with contents of

1 envelope Fleischmann's Active Dry Yeast

Let stand 10 minutes; THEN stir well.

Stir in lukewarm milk mixture.

Stir in

2½ cups once-sifted bread flour
and beat until smooth and elastic; stir in
1½ cups lightly-packed shredded old cheese

Work in

2½ cups more (about) once-sifted bread flour

Turn out on lightly-floured board and knead dough lightly until smooth and elastic. Place in a greased bowl and grease top of dough. Cover and set dough in warm place, free from draught, and let rise until doubled in bulk. Turn out dough on lightly-floured board and knead lightly until smooth. Divide into portions and finish as follows:



1. CHEESE LOAF

Shape half a batch of dough into a loaf and fit into a greased bread pan about 4½ by 8½ inches. Grease top. Cover and let rise until doubled in bulk. Bake in a moderately hot oven, 375°, about 40 minutes—cover loaf with brown paper during latter part of baking to avoid crust becoming too brown.

2. MARMALADE BRAID

Roll out a quarter of a batch of dough into an 8-inch square on a lightly-floured board; loosen dough. Spread with ¼ cup marmalade and sprinkle with ¼ cup chopped nutmeats. Roll up jelly-roll fashion; seal edge and ends. Roll out into an oblong 9 inches long and 3 inches wide; loosen dough.

Cut oblong into 3 lengthwise strips to within an inch of one end. Braid strips, seal the ends and tuck them under braid. Place on greased cookie sheet. Grease top. Cover and let rise until doubled in bulk. Bake in a moderately hot oven, 375°, about 20 minutes.

3. CHEESE BREAD STICKS

Cut a quarter of a batch of dough into 12 equal-sized pieces and roll, one at a time, into slim strips about 7 inches long. Brush strips with water and roll lightly in cornmeal. Place, well apart, on greased cookie sheet. Cover and let rise until doubled in bulk. Bake in a moderately hot oven, 375°, about 10 minutes.

The Bride and Her Wedding

Continued from page 51

in the same color, or varying shades of it, or in harmonizing colors. The maid or matron of honor often wears the same style dress but in a complementary shade. All the girls will wear some kind of headdress and gloves. It is customary for the bridesmaids to buy their own bridal outfits, after the bride has made the selections. A considerate bride will choose a fairly inexpensive style for her attendants, preferably one which can be worn later.

If a flower girl is to be included, she should be dressed in a style similar to the other attendants. It is important that a child should be completely at ease. Prepare for this beforehand by allowing her to practice walking in the dress and by "breaking in" new, stiff shoes. A flower girl makes a charming addition to the bridal party but only if she is relaxed, comfortable and knows exactly what duties are hers to fulfil.

Mothers of the bride and groom usually wear afternoon dresses in soft shades. Matching or harmonizing hats, gloves and corsage complete the ensemble. For a more formal wedding, floor-length dresses in pastel shades or greyed tones are becoming.

When the bride wears a formal gown, the groom, best man and ushers should dress formally too—to be perfectly correct. However, if the bride wears a simple full-length gown without a train, the men may wear dark business suits in blue or charcoal grey. For an informal wedding, the groom wears a dark business suit. In the summer, a lightweight suit in blue or grey is correct.

The bride usually chooses a sister or intimate friend as maid or matron of honor. Bridesmaids are chosen from among her close friends or relatives.

Bridal attendants have certain functions to perform. It is customary for bridesmaids to arrange a shower or a party in the bride's honor. (It is not considered good taste for a sister or other relative to hold a shower for the bride.) They may also help address invitations, announcements, trousseau tea invitations and generally assist the bride with her plans. The maid or matron of honor is the only one of the bride's party who has duties to perform at ceremony time. She adjusts the bride's veil and train, holds the bouquet during the ceremony and lifts back her veil. If it's to be a double ring ceremony, she may carry the groom's ring. She is one of the witnesses to sign the marriage certificate.

The groom asks his brother or best friend to attend as groomsman. Brothers of the bride or groom or close friends of the groom serve as ushers. The best man and ushers furnish their own clothes with the exception of identical ties which the groom may wish to provide.

The best man, besides acting as bolsterer to the groom throughout the proceedings, helps him pack and dress and delivers him to the church half an hour before the wedding. He checks to see that the groom has the wedding license and Wasserman test certificate. (It's a good idea to give them to the minister the night of the wedding re-

hearsal.) The best man also makes sure he has the bride's wedding ring in his pocket.

Decorations for the church should be kept relatively simple. Besides flowers on the altar you may want a basket of flowers on each side of the altar. Small arrangements of garden flowers and greens on the pews are effective. For a late afternoon or evening wedding many brides like candelabra placed at the altar.

It is customary for the bride and groom to give a small gift to each of the attendants. For the bridesmaids and maid of honor, jewelry is always appreciated. Strings of pearls, tiny pearl earrings, an evening bag or other personal gift is ideal. For the ushers and best man, cuff-links and tie pin, leather wallets or travelling clocks are gifts that will be received with enthusiasm. Present the gifts whenever the whole wedding party is together at some time prior to the wedding. A wedding rehearsal, at which the minister, and the entire wedding party are present, usually takes place the evening before the wedding. The occasion provides an opportunity for the final details of the ceremony to be arranged.

THE great day has dawned at last! The maid of honor, bridesmaids and flower girls gather at the bride's home about an hour before the ceremony. This gives time for picture-taking and distributing bouquets. When leaving for the church, the bride's mother rides in the first car followed in second and third cars by the maid of honor, bridesmaids and flower girl. In the last car are the bride and her father. Plan to arrive at the church 10 to 15 minutes before the actual ceremony so you have a chance to give final touches to your hair and veil.

At the first note of the wedding march, the clergyman enters from the vestry door. The groom and best man wait until he has reached his place in the chancel, then the bridegroom enters, followed by the best man. At the same time the groom leaves the vestry, the ushers in pairs, start up the aisle from the back of the church, with a distance of at least two full steps between them. The bridesmaids come next, the shortest leading; then the maid of honor, followed by the flower girl. The bride on the right arm of her father, enters at a distance of from eight to 12 feet behind the last attendant. A natural firm, slow pace should be followed, in step with the music. If the church has no middle aisle, the wedding party should enter by the left aisle and leave by the right.

When the ushers reach the front of the church, they turn to the right and stand on the groom's side. The bridesmaids go to the left, standing on the bride's left. When the bride reaches the head of the aisle, she releases her hand from her father's arm, takes a step forward and stands by the groom, on his left. After the ceremony, the bride and groom lead down the aisle, followed by flower girl, best man and maid of honor, then the ushers and bridesmaids, paired. The parents follow.

Wedding pictures taken by a professional or amateur photographer are a wonderful memento of your special day. Arrange with the minister beforehand whether or not picture taking is

**BETTER GARDENS
MORE BEAUTIFUL LAWNS
WITH LESS WORK!**

Planet Jr.®

Time-Saver Equipment

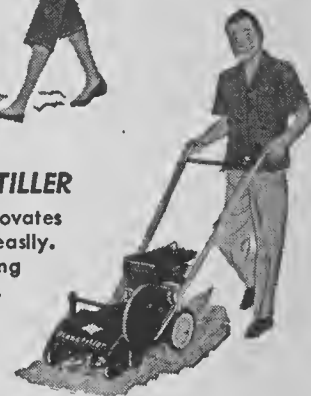
SUPER TUFFY

Is sturdy and compact. Its 1½ H.P. unit is geared low for utmost power, ease of operation. Does all types of outdoor work quickly, efficiently. Works with many attachments.



NEW PLANETILLER

prepares seed beds, cultivates gardens, renovates lawns, mulches and cleans up borders easily. Transforms quickly into rotary mower by using Planet Jr. A52T Rotary Attachment.



NEW PLANET JR. SUPERIDER

saves you hours of time, labor, money on upkeep of gardens and lawns AND... you ride as you work. Superider spreads seed and fertilizer, handles heavy loads and gang mowers with ease—costs surprisingly little. Present Super Tuffy owners can convert to Superider at low cost.



PLANET JR. HAND TOOLS

do every job because there's one for each specific job. All are expertly designed for efficiency, convenience, economy.



Single Wheel Hoe



Fertilizer Spreader



Double Wheel Hoe



Jiffy Seeder



Grass Edger



Garden Plow

Finest
in the
Field



Write for details today!

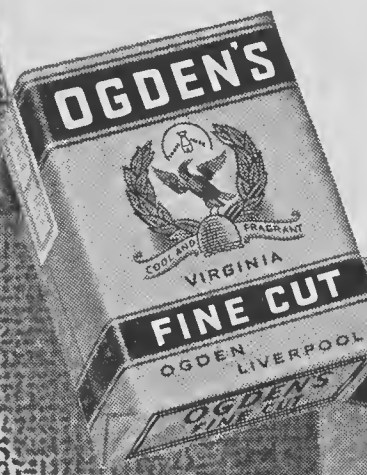
S. L. ALLEN & CO., Inc.
3433 N. 5th Street, Philadelphia 40, Pa.

roll your own



with **OGDEN'S**

Quality fine cut



A FINE CUT
WITH A
distinctive
flavour

REGULAR \$6.00 VALUE
ONLY \$2.00 LIMITED
 TIME ONLY

**ALL-PURPOSE KITCHEN
 UTILITY KNIFE**

Hand-forged stainless Swedish steel. Crafted by the Artisans of Solingen. Cuts the freshest bread or slices tomatoes to an eighth of an inch. You'll say it's the finest knife you've ever used. Length 12", blade 7".

Order today . . . write or simply enclose this ad with your remittance or C.O.D. to . . .

Solingen Corp. (Canada) Limited
 Port Credit, Ontario
MONEY BACK GUARANTEE

Helpful Suggestions

for solving many farm problems are found in every issue of *The Country Guide*.

allowed in the church proper. Many clergymen will not allow this practice. Avoid disappointment and frustration by checking *before* the day of the wedding. Plan to have the posed pictures taken in a separate room, away from the general confusion. Try to keep picture taking time to a minimum—your guests want to see you and your husband! Some sort of entertainment may be provided for the guests while the photographs are being taken. Records of soft music make a pleasant background.

A large or small reception is purely a matter of choice. Some brides prefer a small lunch (supper or breakfast, depending on the time of day) at their home or a nice restaurant for the wedding party. Others entertain a larger

number less elaborately in the church parlor or a rented hall.

The receiving line should not be stiff and formal. The bride's mother as hostess should be first in the group with the groom's parents next, then the bride's father (unless he prefers to mingle with the guests). Next come the bride and groom, maid of honor and bridesmaids, all in a row. Ushers and best man do not usually stand in the line.

The bride and groom cut the first piece of cake, then friends can continue serving.

If you plan to display wedding gifts at the reception, they should be placed on linen covered tables away from the serving table and out of the confusion. It's more tactful to group similar gifts

together and to remove cards of the givers. Be sure to keep a list of gifts and givers to use when you write thank-you notes.

If the bride throws her bouquet she does it as she leaves to dress for going away. Some couples slip out after everyone at the reception has been greeted and served, saying goodbye only to their parents. Others think it's fun and more sporting to bid everyone goodbye amid a shower of confetti and good wishes.

The bride and her family pay for the invitations, announcements, photographs, flowers, music for the church, reception expenses, flowers and gifts for the bride's attendants. The groom's expenses include the wedding ring, marriage license, flowers for the bride and the mothers, boutonnieres for the men of the wedding party, gifts for the ushers and the best man, minister's fee, the bride's wedding gift, and the wedding trip.

One last word of advice. Make sure that you have sufficient rest before the wonderful day arrives. A worn out bride and groom are poor substitutes for a romantic heroine and hero. V

Bedtime Story Man



Aunt Sally entertains a friend.

WITHIN the treasured hoard of childhood memories the beloved animal characters of Thornton Burgess hold a fixed and cherished place. The joys and sorrows of such lovable characters as Peter Cottontail, Jimmy Skunk, Unc' Billy Possum, Grandfather Frog, Danny Meadow Mouse and other woodland creatures have brought laughter and tears to three generations.

To millions all over the world Burgess has been and still is affectionately known as the "Bedtime Story Man." He is now 82 years of age, and continues to write a nature story each day, six days a week. To date he has written over 13,000 stories and 100 books. "A story a day, except Sundays, since February 17, 1912," he says.

Burgess makes his home in Hampden, Massachusetts, in a grey-shingled house surrounded by tall elms. Near the house, which was built in 1732, is a small brook, appropriately called Laughing Brook, and beyond that a wide open meadow. A large barn screened on two sides serves as his writing room.

His first nature stories were written to entertain his son, Thornton Burgess Jr. When his son, at five years, went to visit his grandmother his father con-

(Please turn to page 60)

Children Need

**EXTRA
 ENERGY**

serve them plenty of

**CROWN BRAND
 CORN SYRUP**

CROWN BRAND CORN SYRUP
is delicious... serve it



on hot or cold cereals,

as a spread on bread or toast,

as a topping on pancakes and waffles,



as a dessert by itself, as a sauce

on puddings and ice cream.



Monarch

SUMP PUMPS

(Cellar Drainers)

Why Pay More ?

Model No. 40
1/4 H.P. "Special"
Only

\$49.95

Model No. 41
1/4 H.P. Standard

\$64.50

Model No. 42
1/3 H.P. H.D.

\$69.50

Insist on a Manitoba
Made "Monarch"
at your Dealer



Monarch Machinery Company Ltd.
889 Erin Street
WINNIPEG 10 - CANADA

Miniature Gardens

by JEWELL CASEY

Tiny "dish" gardens are a joy to make and a satisfaction to observe during any season of the year



1. Large coat buttons were used to make these tiny gardens.

"JAPANESE," "dish," or "indoor gardens" as they are variously known, offers many opportunities for making someone happy. The thrill of landscaping, selecting suitable plants then viewing results of your own handiwork, may be experienced, even though it be on a very small scale.

No special artistic talent is necessary to design and make gardens in bowl, trays or buttons!

Illustration No. 1—Button Gardens—yes, that is right, large coat buttons were selected for these pretty gardens. First give the button a coating with glue and then place upon it wee plants, tiny rocks and little seeds or pods. As much soil as possible should be placed around the living plants and sand sprinkled over open spaces.

Minute mosses, tiny cacti, succulents and many other small plants may be

used. And if watered daily, the plants will grow and live for several months.

All kinds of gardens, from mountain landscapes to seashore scenes, may be made on buttons. Suitable figurines may be modeled from clay, or taken from penny-candy machines.

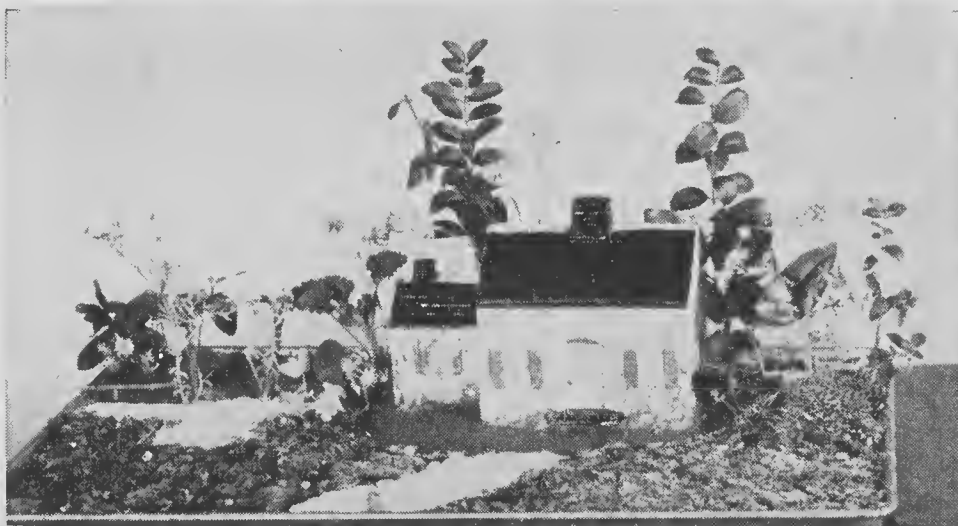
Not only do miniature gardens make pleasing gifts, but may be used for decorations throughout an entire season, such as illustration No. 2. Here is a wooden bowl filled with coarse sand and pebbles, an appropriate container for a miscellaneous assortment of cacti. Several plants can be put in one container during dormant season, and should be watered very sparingly.

There are so many different kinds of cacti, and most any of them will prove interesting to watch their development.

Illustration No. 3—For a garden like this one, flat cookie tins or any shal-



2. Cacti set in a bowl lends an attractive touch.



3. An effective scene set in a shallow tin or tray.

ORDER YOUR CALGARY EXHIBITION & STAMPEDE GRANDSTAND TICKETS

NOW!

SEE THE "GREATEST OUTDOOR SHOW ON EARTH"

JULY 9-14

PRICES

EVENINGS		AFTERNOONS	
Grandstand	Reserved	Grandstand	Reserved
\$2.00	\$1.50	\$1.75	\$1.50
Reserved East Stand		Reserved East Stand	
\$1.00		\$1.00	

Enclosure Only 75c

USE THIS HANDY COUPON FOR MAKING ADVANCE RESERVATIONS

CALGARY EXHIBITION & STAMPEDE
CALGARY, ALBERTA

Enclosed please find the sum of

\$.....
payment for the following tickets:

RESERVED SEATS

Evenings

Quantity Price

Monday@.....
Tuesday@.....
Wednesday@.....
Thursday@.....
Friday@.....
Saturday@.....

Afternoons

Quantity Price

Monday@.....
Tuesday@.....
Wednesday@.....
Thursday@.....
Friday@.....
Saturday@.....

NAME.....

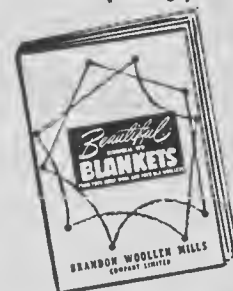
ADDRESS.....

CITY.....

Remittance MUST Accompany Order

NEW WOOL BLANKETS FROM SHEEPS WOOL OR OLD WOOLLENS

Send knitted woollens, woven woollens, cottons and obtain large, good wool blankets, auto robes, comforters, socks, floor rugs, sweaters, sheets, pillow cases and many other useful household articles, at a surprisingly low cost.



WRITE FOR FREE Descriptive Booklet

See how easy and economical it is our way.

MAIL THE COUPON TODAY

BRANDON WOOLLEN MILLS CO. LTD., BRANDON, MANITOBA

Please send me by return mail your free booklet with complete information. C

NAME.....

ADDRESS.....

TOWN.....PR.....

Feeling out-of-sorts?



If you feel out-of-sorts—suffer nervousness, or sleeplessness—your condition could be caused by the caffeine in tea and coffee.

DRINK POSTUM. Delicious Postum is entirely free from caffeine. Made instantly in the cup, no fuss, no bother. Costs less than a cent a cup. Ask your grocer for Postum. A product of General Foods.

Drink POSTUM

P-383



**Sunburn like Hospital Bills can be serious
—don't snooze in false security.**

IS YOUR HOSPITALIZATION TAX PAID IN FULL?

If your 1956 Hospitalization Tax is more than \$20, and you paid part of it by November 30, 1955, your final instalment of the tax is due May 31 of this year.

MAKE YOUR FINAL PAYMENT BEFORE MAY 31 and protect your family against the possibilities of costly hospital bills. Your first payment protects your family until June 30. Remainder of the tax is due May 31. If it is not paid by that date, there will be a break in your protection from July 1 until one month after the date of final payment.

SASKATCHEWAN HOSPITAL SERVICES PLAN

Generally Speaking . . .

no matter how big or how wealthy an advertiser, he cannot afford to advertise a poor quality product. The advertiser's name or his brand on a product is your assurance that satisfaction is guaranteed.



DO YOU KNOW

the safe, convenient, easy way to ensure intimate feminine hygiene?

Zonitors—dainty, greaseless vaginal suppositories are powerfully effective yet absolutely safe. They completely deodorize, guard against infection and kill every germ they touch in hours of continuous action. Inexpensive too . . . buy a package today!

Zonitors
vaginal
suppositories



STOP THAT HEADACHE

When you suffer from pain of Headache, Neuralgia or Muscular aches you want to stop that pain fast . . . So take Aspirin! A tablet starts disintegrating almost the instant you take it—starts to relieve that pain almost instantly!

Always Ask For
ASPIRIN
A PRODUCT OF BAYER



low tray make good containers. Lawn or green moss set in damp sand will keep green a long period. The rustic pergola made of dried twigs gives added charm. A spoonful or two of dry sand makes the walk. Any variety of dried and green plants can be used in the landscaping.

The house in this garden was made of cardboard. Doll houses, or blocks of wood can be used in miniature gardens. If winter scene is desired, use artificial snow and dried leaves and colorful berries for plantings.

A colorful basket is made by selecting a large carrot—cut about two inches from the top, or wide end. Hollow out the center from the cut end. With nail, or ice pick, punch two holes near the top of the cut-off portion, tie in cords for hanging, then hang in window. Keep filled with water and very soon foliage will appear and start growing upward.

A sweet potato vine is pretty and will last a long time. Select a jar, pint-size fruit jar is suitable, then get potato with small end that will go down into the jar an inch or two, fill jar with water to cover end of potato and as vine starts growing make a little support for it and encourage it to grow upward, instead of hanging down.

A pineapple is another pretty plant to watch. When preparing a fresh pineapple, leave about one inch of fruit onto top, set in moist soil and soon it will root and begin putting on new blades.

Study of the Jobless

A STUDY of some 2,000 jobless men in Pembroke and district, Ontario, was made by a Citizen Committee on Employment, composed of a cross-section of industrial, financial, religious and school groups in the city of Pembroke. It was completed just one year ago and the findings were released by National Unemployment Insurance Commission and summarized in the Financial Post (November 26, 1955). The committee found:

More than 80 per cent of 1,600 of the male unemployed in Pembroke and district, in all age groups, received grade eight or less education. The other 20 per cent, or 400, had completed grades nine, ten or eleven. None of the unemployed had grade twelve or better training.

Following the study, the committee sent speaker-panels, made up of representatives of business and industry, to all schools in the district. In addition a letter was sent to every household in the area, pointing out the importance of students remaining in school. Extensive use was made of newspaper and radio publicity. Several other municipalities in the Ottawa valley made arrangements to plan a similar appeal.

The U.I.C. report noted: "Already we know of cases where students have decided to stick it out rather than quit," and added the recommendation that: "Such a project should be carried out near the termination of each school year. Thus over a lengthy period aim at stemming the high percentage of drop-outs that exists today."

ALBERTA in the CANADIAN ROCKIES

*offer you
so much MORE!*



Whether your choice is sports — golfing — swimming — hiking — fishing, or just plain relaxing, you'll find no place to match Alberta. Enjoy Alberta's stimulating climate and traditional events including Indian Ceremonies and Stampedes.

This year make your vacation an Alberta holiday. Ideal shopping and first class Government inspected and graded accommodation.



For free booklet and map send this ad with your name and address to Alberta Travel Bureau, Legislative Bldg., Edmonton, Canada.

B-1

Know Alberta Canada Better

TEETHING TROUBLES



At teething time, baby is often fretful because of irregularity or an upset tummy. Try Baby's Own Tablets. These mild, sweet little tablets are easy to take, taste good, and give prompt relief. Equally effective for constipation, digestive upsets and other minor infant troubles. In use by mothers for over 50 years. No "sleepy" stuff. No dulling effect. Get a package today at your druggist.

**BABY'S OWN
TABLETS**

Unusual Handiwork

Deft use of color and design make these items of special interest to the needleworker

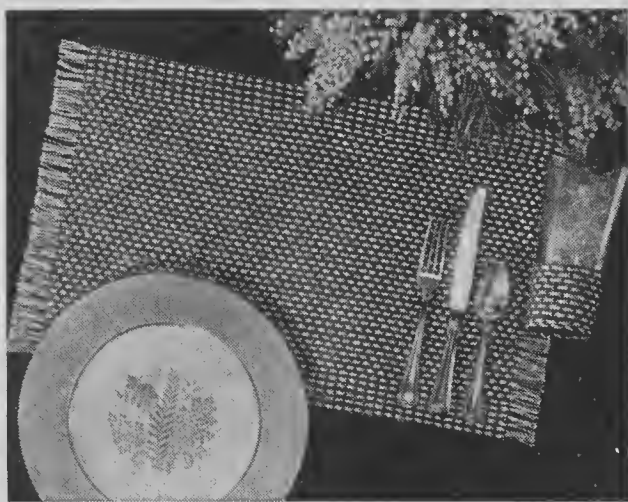


Design No. E-512-B

A little girl will look fresh and sweet in this dainty, flowered playsuit. Simple to make and easy to launder. Trimmed with delicate eyelet embroidery for added appeal. Playsuit is made with bib attached to shorts. Half skirt buttons at sides and ties in front. Will fit sizes 4 to 6. Cutting and sewing directions are included in pattern. When cutting the fabric, add ½-inch seam allowance to patterns, except when pieces are given by measurement. Materials: ⅞ yard sanforized cotton, 4½ yards eyelet edging, 6 pearl buttons, sewing thread and bias binding. Design No. E-512-B. Price 10 cents.

Design No. CS-401

Make tweed place mats for smart table covering. Quickly made—merely chain crocheting interwoven with colored thread. Matching glass jackets equally simple. Place mat measures 12 x 20 inches, including fringe. Materials: 2 balls cronita cotton, 4 balls pearl cotton, size 8 (contrasting shade), and No. 7 crochet hook. Design No. CS-401. Price 10 cents.

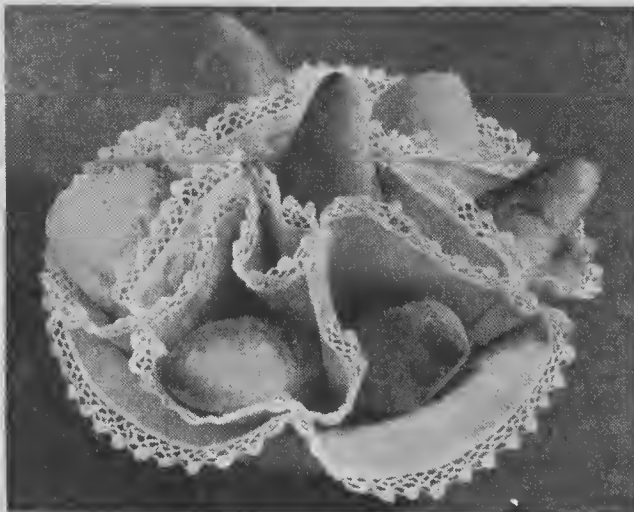


Design No. CPC-7411

For summer wear make these crisp-looking crocheted gloves. Delicate and feminine in appearance, yet strong wearing. Ideal to wear with pretty summer cottons. Give "dressed" look to your ensemble. Make several pairs in white or colors to accessorize summer outfits. Gloves are cool and comfortable to wear even on the warmest days. Instructions are given for average size. Gauge: 9 sps. makes 2 inches; 10 rows makes 2 inches. Materials required: 3 balls white or colored crochet cotton, size 20, and No. 10 steel crochet hook. Design No. CPC-7411. Price 10 cents.

Design No. CPC-6458

Muffins and rolls stay wonderfully warm in this novel hot muffin case. Crocheted edging adds decorative touch—pretty enough for a table center. Ideal gift or bazaar item. Materials: 5 balls white tatting cotton, size 70 or 1 ball 6 cord crochet cotton size 70, steel crochet hook No. 14, ½ yard linen—36-inches wide, ½ yard white ribbon—¾ inch wide. Design No. CPC-6458. Price 10 cents.



Address orders to The Country Guide Needlework Department, 290 Vaughan Street, Winnipeg 2, Manitoba.

You'll never have these worries if your sewing machine is a **SINGER**!

How good is the guarantee behind it?

Will parts be available 5 years from now?

If I move ... can I still get service?

Will the machine stand up under long use?



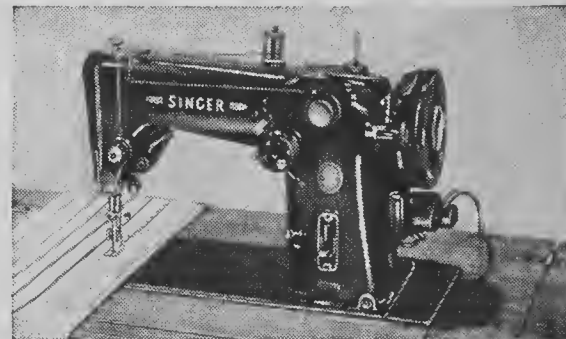
You can buy your shiny new SINGER* Sewing Machine without a worry in the world! It's built with famous SINGER dependability . . . backed by a reliable SINGER warranty.

Parts and service present no problem, either — not from SINGER, the company that's made the world's finest sewing machines for over 100 years! Wherever you are, you won't be far from a SINGER SEWING CENTER . . . there are more than a hundred of them, from coast to coast.

SINGER Sewing Machines are built to last a lifetime . . . by the only company that manufactures sewing machines in Canada, of Canadian materials, by Canadian craftsmen.

"SWING-NEEDLE"* SINGER AUTOMATIC

Does hundreds of decorative stitches as simply as it sews a straight seam.

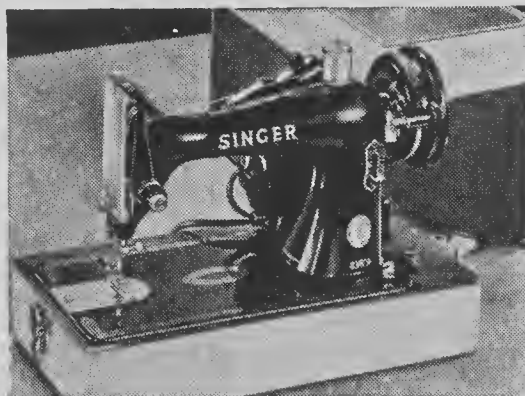


NEW SINGER BUDGET PORTABLE

An electric round-bobbin portable with the features of a more expensive machine.

**Pay as little as
\$1.31† a week**

†after minimum down payment



**CLIP OUT
AND MAIL TODAY
FOR
FREE SINGER
CATALOGUE!**

Mail to SINGER SEWING MACHINE COMPANY,
Dept. CG. 56. at address nearest you:

**201 Kennedy Street, Winnipeg, Man.
20 Bloor Street West, Toronto**

Please send me, FREE of charge, the SINGER catalogue illustrating new models:

NAME.....

ADDRESS.....

CITY.....

SINGER SEWING CENTERS

*A Trade Mark of THE SINGER MANUFACTURING COMPANY



If you haven't money to burn —read this!

You probably don't put your "spare" dollars to this use—but it is strange how that odd dollar bill seems to vanish. How much better to put your dollars to work with Investors Syndicate—building a substantial cash reserve for your future.

For example, do you realize that about \$1 per day, in an Investors Syndicate plan, will bring you a *guaranteed minimum* of \$10,000 in cash in twenty years time!

All you have to do is put aside a small sum regularly. Then the powers of wise investment and compound interest take over, and help you reach your savings goal—easily and surely. Join the more than 100,000 Canadians who are enthusiastic about the Investors Syndicate plan. See your nearest Investors representative today.

**Investors
syndicate** OF CANADA, LIMITED

HEAD OFFICE: WINNIPEG • OFFICES IN PRINCIPAL CITIES

HIGH TWIST — 1st QUALITY
NYLONS 2 pr. \$1.25

Specify 15 denier (very sheer) or 30 denier (service sheer). State size, length, and colour (light, medium or dark). Satisfaction guaranteed or money refunded. (Seamless nylons send \$2.25 for 2 pairs.)

**ANN PAGE, Dept. CG, 47 ELM ST.
TORONTO 2**

What Causes Wool to Shrink?

Washing wool in hot water and using the wrong kind of soap causes millions of tiny fibres to break down and shrink. Play safe! Use ZERO Cold Water Soap. No shrinking! Softens water! 59¢ package good for dozens of washings. At your local drug, grocery and wool shops. For Free sample write Dept. 1D, ZERO Soap, Victoria, B.C.

Bedtime Story Man

Continued from page 56

tinued to write nature stories and mail them so that his grandmother could read them to the boy. In 1910 the firm of Little Brown published his first book "Old Mother West Wind" which received such acclaim that others quickly followed. Burgess has written continuously for the same publisher.

HIS own childhood was one of hard work as his father died when he was a small baby. At ten the young lad mowed lawns, shovelled walks and did other jobs to help his mother. His first real job was as a shoe salesman, then he became a copywriter for an advertising agent and eventually did magazine work. At 35 he made the momentous decision to leave the security of his job and to work as a free-lance writer. His books were enthusiastically received and he was able to make writing his life's work.

Quietly he wrote, lectured and founded nature study clubs as well as giving the popular radio series "The Bedtime Story." The adventures of Sammy Jay, Reddy Fox, Buster Bear were real to his listeners. They laughed with glee when Chatterer, the red squirrel, hid inside Farmer Brown's corn crib and frightened Sammy Jay almost to death by grabbing his beak when he tried to steal corn. Indirectly they gathered a store of information about the playful kindly creatures that lived in the world around them. Later this radio series was published in book form—some 20 books illustrated with the artless charming drawings of Harrison Cody.

In his stories Burgess gave his animals names and had them talk to each other like humans but all other traits or actions of birds and animals are true to their natural ways. A lifetime of observing wild creatures gave him an accurate knowledge of their habits so that throughout all his writing he has always been truthful to nature.

In his recently completed book, "Aunt Sally's Friends in Fur," Burgess tells a true story of one of his Cape Cod neighbors, Aunt Sally and the woodland folk that came each night to visit and feed in her woodhouse. So trusting did these wild creatures become that skunks, raccoons and woodchucks would jump up on a box and then onto Aunt Sally's lap to be petted and receive food from her hand. Burgess visited Aunt Sally's "exclusive Woodhouse Night Club" to observe and photograph the nightly visitors. You can imagine his anxiety when he decided to explode a flash bulb to photograph a skunk sitting in Aunt Sally's lap! The skunk behaved like a gentleman and the picture was a success.

At the woodhouse he noticed that although it was generally thought that raccoons wash their food before eating it, this is not true, for the raccoons that came to the woodhouse made no use of a pan of water that stood nearby. Burgess continues to learn by observing animals and birds and finds there is always more to learn.

At present, Mr. Burgess is writing his autobiography which he modestly says "may not be very interesting." He plans to continue writing nature stories until he is a hundred. — Ann Tilenius.—(Photo from new book.) ✓



When your child is cross, listless, because of constipation—don't give a harsh adult laxative—give gentle CASTORIA. CASTORIA is made especially for children. It helps relieve stomach upsets, lack of appetite, feverish conditions, fretfulness, irritability, restlessness at night, colic, fussiness, teething troubles—when these are caused or aggravated by irregularity.

CASTORIA contains gentle vegetable regulator—no harsh drugs to gripe or cramp. Children of all ages like the good taste. Only 45¢ large bottle, 75¢ family economy size.



Give
GENTLE

CASTORIA

Clinically approved for children.
Safeguarded by 141 tests.

Always make sure your mail is properly addressed, and that you have signed your name and address to your letter or subscription order. An omission will cause delay in filling your order.

**WITH
SOFT WATER**

One cake of soap
does the work
of 4 or more!

SEND FOR THIS BOOKLET

With a "DIAMOND Water Softener you'll use only 1/4 as much soap. Shorter washing time saves wear on clothes, too. Actually pays for itself!

OSHKOSH FILTER & SOFTENER CO. (CANADA) LTD.
BRANDON (Dept. C) MANITOBA

SUNNY BOY BICYCLE WINNERS

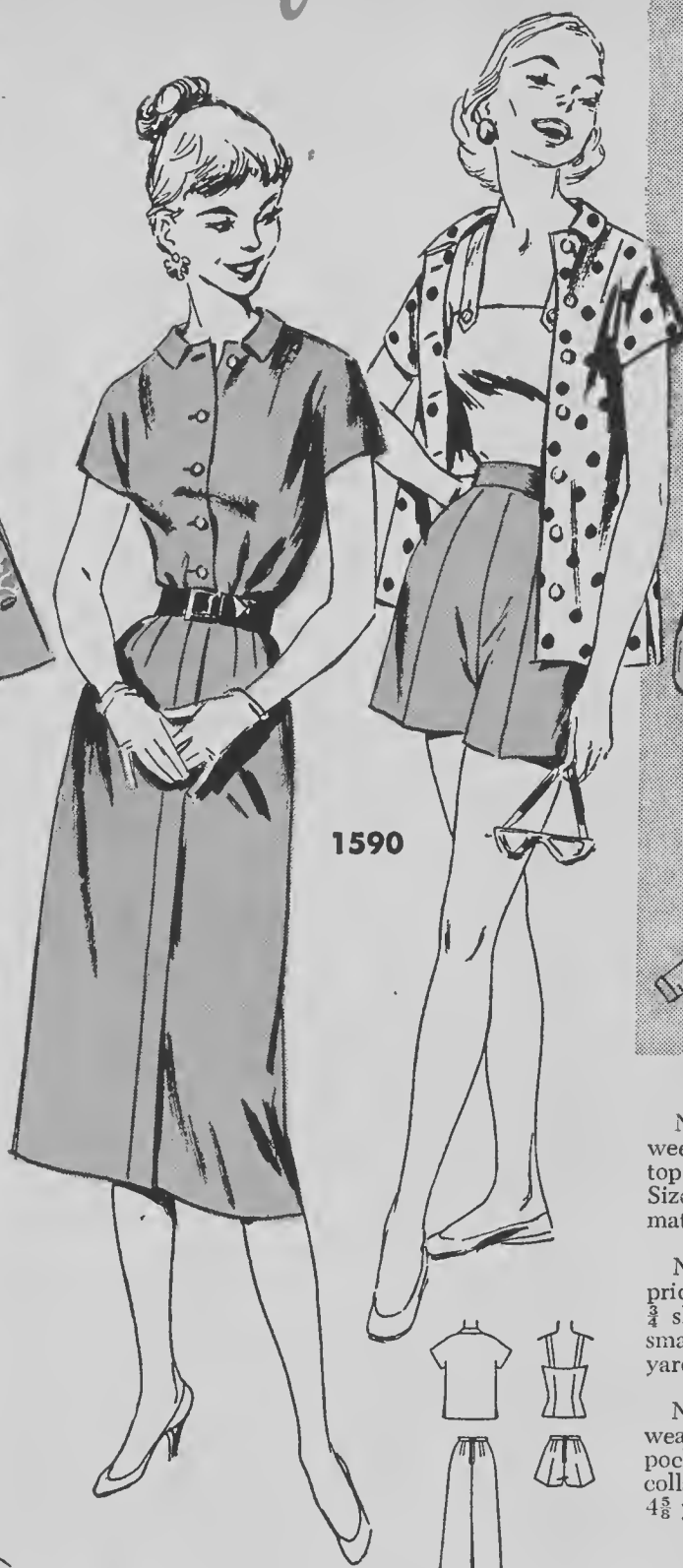
- No. 1—ROBERT HERMAN,
St. Walburg, Saskatchewan.
- No. 2—AUDREY MARKEL,
Edenwold, Saskatchewan.
- No. 3—LESLIE SMITH,
Belseker, Alberta.
- No. 4—WAYNE BOURKE,
Edson, Alberta.
- No. 5—KEITH PYBUS,
3428 Brundary Bay Rd., Ladner, B.C.
- No. 6—HAROLD HUGET,
Lemberg, Saskatchewan.

Sew for Summer



No. 1586—Pert, stylish blouse with deep collar laced with ribbon has a casual look. Simple to make—only two main pattern pieces. Basic pattern can be varied to give three different blouses. Sizes 11, 12, 13, 14, 15, 16, 18. Size 14 requires $1\frac{3}{8}$ yards 36-inch material. Price 35 cents.

No. 1550—Dance or relax in this popular new "Borderama" skirt. Two major pattern pieces form skirt. Special step-by-step cutting and sewing directions included for beginner. Sizes 24, 26, 28, 30, 32-inch waist. Size 28 requires $3\frac{3}{8}$ yards 36-inch material. Price 35 cents.



No. 1590—For travelling, sunning or lounging here is a complete week-end wardrobe—pretty drop-sleeve blouse, slim skirt, halter top and shorts. Designs for all four pieces included in pattern. Sizes 11, 12, 13, 14, 15, 16, 18. Size 14 requires $6\frac{3}{8}$ yards 36-inch material (four garments). Price 50 cents.

No. 1451—Here is an "all occasion" jacket you will wear with pride. Can be made in three lengths. Jacket features unmounted $\frac{3}{4}$ sleeves with turned back cuff, straight-cut back and front and small pointed collar. Sizes 12, 14, 16, 18, 20. Size 16 requires $2\frac{5}{8}$ yards 54-inch material. Price 35 cents.

No. 1577—For half-size figure. A graceful, becoming dress to wear throughout summer. Features: six-gore skirt with set-in pockets, small drop sleeves, slightly scooped neckline with pointed collar. Sizes $12\frac{1}{2}$, $14\frac{1}{2}$, $16\frac{1}{2}$, $18\frac{1}{2}$, $20\frac{1}{2}$, $22\frac{1}{2}$, $24\frac{1}{2}$. Size $18\frac{1}{2}$ requires $4\frac{5}{8}$ yards 36-inch material. Price 35 cents.



No. 1597—For toddler, romper-dress is ideal. Dress is gathered daintily into yoke and has button front for easy dressing. Sizes $\frac{1}{2}$, 1, 2, 3. Size 2 requires $2\frac{5}{8}$ yards 36-inch material. Price 35 cents.

No. 1593—For boy or girl, sunsuit and jacket is a must for summer. Sunsuit can be made with snap closure at crotch. Sizes $\frac{1}{2}$, 1, 2, 3. Size 2 requires $1\frac{3}{8}$ yards 36-inch material. Price 35 cents.

No. 1594—One-piece toddler's overalls ready for action. Features: set-in sleeves, elasticized waist, peter pan collar, button front. Sizes $\frac{1}{2}$, 1, 2, 3. Size 2 requires $1\frac{3}{8}$ yards 36-inch material. Price 35 cents.

No. 1561—For style-conscious miss, a dainty dress and jacket for "best" wear. Features: slim bodice, cap sleeves, gathered skirt. Sizes 7, 8, 10, 12, 14. Size 10 requires $4\frac{1}{4}$ yards 36-inch material. Price 35 cents.

All patterns are printed with instructions in English, French and German.

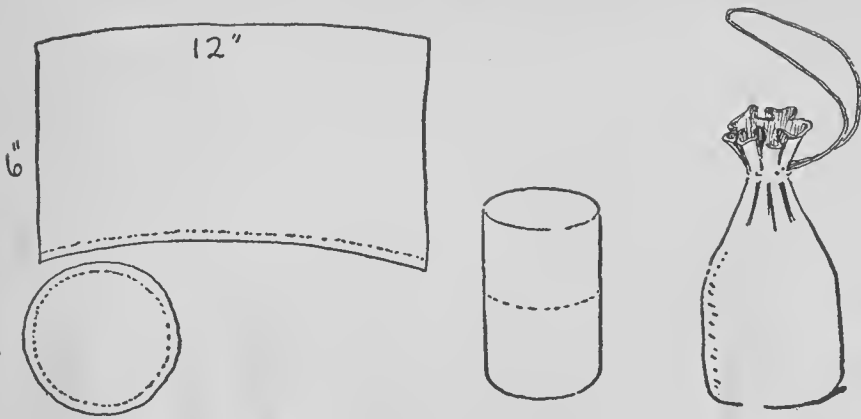
State size and number for each pattern.

Note price, to be included with order.

Write name and address clearly.

Order Simplicity Patterns from The Country Guide Pattern Service, Winnipeg 2, Man., or direct from your local dealer.

Country Boy and Girl



HOW happy we are to shed winter clothes when fine warm May days come along! Now we hurry to get out skipping ropes, bicycles, marbles and baseballs. Once again we play old favorite outdoor games—tag, hide-and-seek, hopscotch and three deep.

Mother is busy making summer clothes for her family. Have you wished you could have a little handbag of your own to match your dress or coat? You could make one from scraps left over from sewing and a circular salt box. Cut off the salt box evenly about three inches from the bottom. Now from scraps of cloth cut a circle which is half an inch larger than the bottom of the salt box (this half inch allows for sewing a seam). You also need a strip of cloth 12 inches long and six inches wide to cover the side of the handbag. Carefully stitch the long side of this strip of cloth around the edge of the circle. Fit the salt box foundation in place, then fold in the remaining cloth and stitch up the side to make a neat joint. At the top of the bag turn in one inch of material to make a heading, then stitch across again to make a space for the drawstring. Thread through the drawstring beginning at the side join. You could also make a handbag as a birthday gift for a friend.

Ann Sankey

Ursa's Shawl

by Mary Grannan

IT was spring, and all things were fresh and new. The bluebirds sang of happy days to come. The robins were proudly displaying their bright new red vests. The flowers were opening fresh buds to greet the sun, and ladies wearing their spring bonnets.

Ursa, the great bear in the sky, saw all these things, and was sad. There was no spring in her life. Spring, summer, autumn, winter, were all the same to her. She tossed her great starry head and sighed. "I can't help it," she said to herself. "I want a new bonnet, too. I've never had a bonnet, and I want one." She didn't tell any one of her thoughts. She knew that they would laugh at the idea of the big bear in the sky wearing a bonnet. Her yearning became so great that her light dulled.

The other stars noticed. "She's worried about something," said Cygnus, the swan.

"But what has she to worry her?" asked Draco, the dragon. "She's one of the most popular stars in the sky. The earth children love her. I've seen them searching for her many times, and when they find her, they point her out and cry delightedly, 'Look, look, there she is. The big bear.'" Draco shook his starry tail. "If I were as well loved as she, I'd not worry."

But Jupiter was not convinced. He felt they should ask Ursa the reason for the change that had come over her. He went to Ursa, but she was silent. She was really rather ashamed of herself for wanting a spring bonnet. She continued to grow duller as the days passed. The Little Bear decided he must pry her secret from her. "Mama," he said, "I know that some-

thing is making you unhappy. I am your child, you can tell me."

The Little Bear gasped, when he heard that his mother wanted a spring bonnet. He had all he could do to keep from laughing. He thought at first that she must be joking, but when he saw that she was serious, he made up his mind to get a bonnet for her. That night, he slid to earth on a moonbeam. He landed in the path of a little white rabbit, who was scampering about in the moonlight.

Little Rabbit laughed. "You frightened me, Little Bear," he said. "I didn't see you coming. It was just as if you had dropped out of the sky."

"I did."

"You did what?" said the puzzled bunny.

"I did drop out of the sky. I slid to earth on a moonbeam. I'm the sky's Little Bear."

Rabbit's pink eyes widened, and his long, pink-lined ears stiffened. He didn't believe at first, but when he saw the stardust in Little Bear's fur, he knew it was true.

Little bear told the rabbit, the reason for his visit to the earth world. "I know it must sound silly, but my mother is such a good mother. She has never wanted anything before. Will you help me to find a bonnet for her?"

Rabbit sat down on a stump and pondered. He wanted to help the little sky bear who was so concerned for his mother's happiness. He had seen ladies' hats in the shop windows, on his rare trips to the city. He would take the little bear there now. It would be safe. All the townsfolk were sleeping. Together, they went to the shopping district, and together, they looked at the spring bonnets, and then they looked at each other. They knew the bonnets were most unsuitable for

Ursa. They were about to leave, when Rabbit noticed a beautifully woven silken shawl. Shawls were very fashionable in that long ago time. Rabbit had an idea. "Little Bear," he said, "a shawl would please your mother just as much as a bonnet. If we get her a bright one, of many colors, it will add to the beauty of the sky."

"Yes," said Little Bear. "We'll get her a shawl of many colors. It will have orange in it, like the marigolds."

"Yellow," laughed Rabbit, "like the daffodils."

"Green," almost shouted Little Bear, "like the grass and the leaves."

"Blue," cried Rabbit. "Blue like the delphiniums."

"Purple," said Little Bear softly. "Purple like the violets that grow in your own deep woods."

And then they were faced with another problem. Where to get such a shawl. But the Little Rabbit had another idea. "We shall ask the spiders to spin a shawl of gossamer. We shall find a meadow, and the spiders will carpet it with gossamer. We shall ask the flowers to stripe it with their colors, and when it is finished, the birds will carry it to the sky."

The spiders were willing to undertake the gigantic task. "But we have

our pride, you know," said old Grandmother Spider. "We want the world to see our shawl."

"We agree that it should, Grandmother Spider," said Rabbit. "What time would you choose?"

The old spider answered, "Our webs shine as silver after a shower," she said. "We would like it to be seen during a sunshower. When the sun comes out before the rain is over, we would like to see our shawl stretching like a scarf across the sky."

Little Rabbit jumped up and down in delight. "And we'll call it Ursa's Shawl," he said. "What a beautiful name, Ursa's Shawl!"

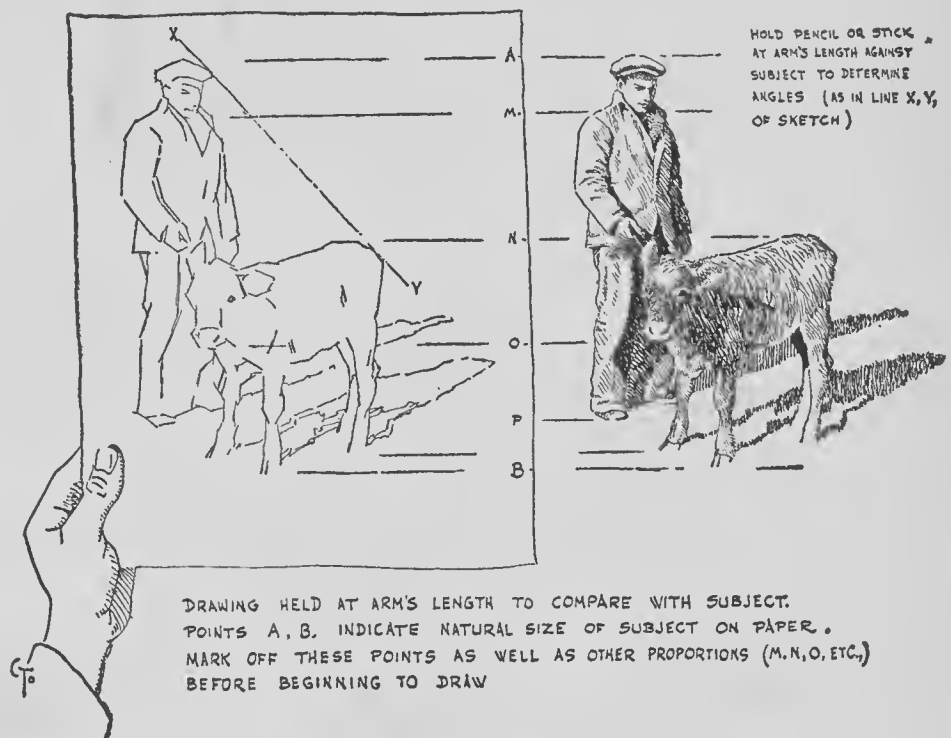
But the earth people gave it a different name. On the first day that Ursa wore the shawl, the sun shone and the rain came together. And across the sky, like a bridge of many colors, the earth people saw it. And in wonder, one of them cried out, "Look! Look in the sky. A bow of colors!"

"It came with the rain," said another. "We'll call it a rainbow."

And from that day, Ursa's shawl has been called a rainbow. The people didn't know it was Ursa's shawl. How could they know? But you know and so do I.

Sketch Pad Out-of-Doors

No. 51 in series—by CLARENCE TILLENIUS



SUPPOSE you are working at the easel with a fair sized sheet of paper. When drawing a subject or model a few yards away it is a good idea to stand at arm's length from paper or drawing board and, looking at paper and subject together let your eye determine the natural or "sight size" the drawing should be on the paper. The sketch illustrates this.

By this method, the eye detects at once what the proportions should be and you can mark them off correctly on the margin of the paper before beginning to sketch in the outlines of your subject.

When you follow this method, the hand and the eye work together naturally, and it is a most logical and natural way of drawing. If the subject is so close as to fill a large sheet, draw boldly and use either a heavy pencil, chalk or charcoal. If the subject is far away and appears small on the paper,

use a sharp pointed pencil, and draw delicately.

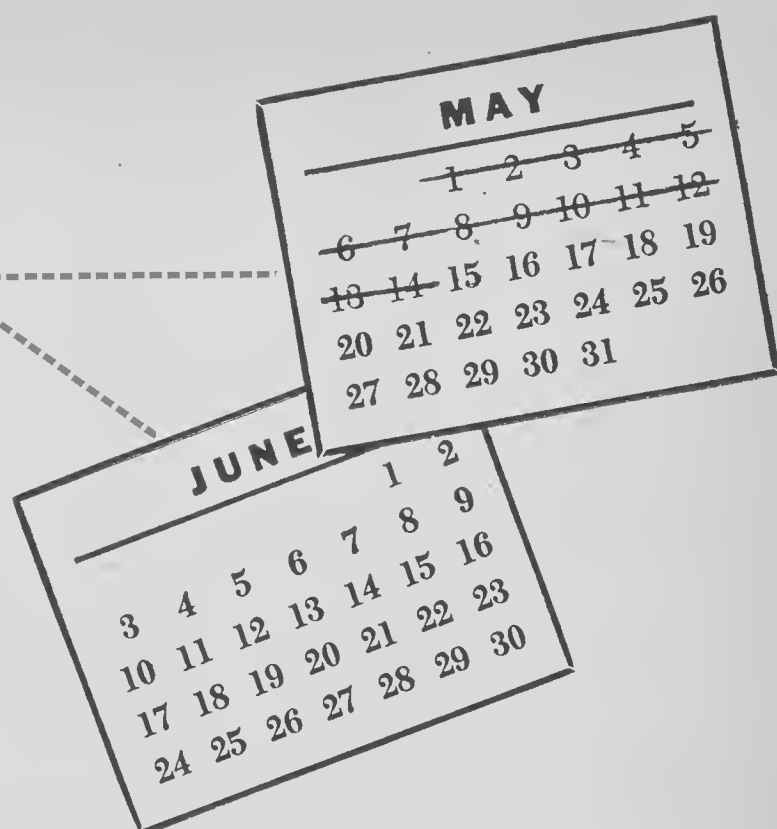
The beauty of working this way is that your eye makes comparisons without effort. When drawing at an upright easel with drawing held vertically one should stand back and draw at arm's length, swinging the arm from the shoulder. It will tire you at first, but is the best way to see your drawing as a whole while you work.

In the accompanying sketch you see how the drawing begins with simple blocking in of main forms. The drawing evolves gradually from these, but these more or less straight lines are the foundation on which the drawing is built.

Another tip. Until you gain experience, it is best to choose as model a subject that cannot move. An empty hayrack on a wagon is excellent for study of angles and direction of lines.

DURING THE CRITICAL WEEKS

of May and June – depending upon seeding time and growth – crop-consuming weeds get their foothold.



YOU CAN CONTROL THIS UNIVERSAL MENACE –

Yes! You Certainly Can!

BY SPRAYING WITH

WEEDONE®

The Original Chemical Weed Killer – Sold throughout the World in 57 Countries



**This year
WEEDONE**
will cost you
less per acre
than ever before!

Weedone prices are at their lowest point ever! BE SURE to ask for WEEDONE. Make a saving. Get the best.

WEEDONE, the world's most effective and economical weed killers, are manufactured by American Chemical Paint Co. Ltd. at Windsor, Ontario. These world-famous formulations are sponsored, recommended and distributed exclusively in western Canada by United Grain Growers Limited and are available at all U.G.G. elevators, distribution points and accredited dealers.

JUST SAY "WEEDONE" PLEASE!

Do not accept "just as good." Insist on the best. You'll have no regrets.

WEEDONE CONCENTRATE 64

The original ethyl ester formulation for hard-to-kill weeds.

WEEDAR 80

Amine Concentrate for more susceptible crops, such as flax, oats and legumes. Will NOT clog spray nozzles.

WEEDONE LV4 (low volatile)

For tough perennial weeds. Its slower action enables chemical to penetrate through plant system to roots for more effective job and before tops are dead.

WEEDAR MCP CONCENTRATE

Kills weeds in all grains including oats, peas, newly seeded flax and established legumes. Is especially tolerant to the crops.

ESTER DUST 5%

Ideal where water supplies are not readily available.

United Grain Growers Limited

FIFTY YEARS OF SERVICE TO WESTERN AGRICULTURE

Wherever you farm...

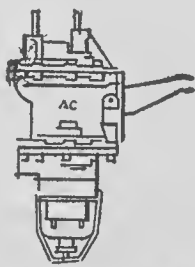
Your source for



AC SPARK PLUGS



AC OIL FILTERS



AC FUEL PUMPS

is as close as your
nearest service station . . .



GM dealer . . . independent garage . . . or
farm equipment dealer.



Standard Factory Equipment on
Nearly Half of All Cars, Trucks
and Tractors Built Today . . .
Best for Replacement Too!

UNITED MOTORS SERVICE — AC DIVISION
General Motors Products of Canada, Limited, Oshawa, Ontario

Our Two Most Interesting Pets

*Who would expect skunks to make affectionate pets,
but be sure to read this true story and be surprised*

by J. A. CAPLING

ONE usually develops a friendly feeling toward any animal, tame or wild, if it has had the misfortune to be wounded, or is left destitute in its infancy, by the death of its mother. Therefore, when my son and the hired man came home from work and informed me that someone had shot a skunk and she was lying dead, while her babies could be heard crying in their nest for food, it was not strange that I should hand them a pail and say, "Go and dig the little ones out and fetch them home to the barn."

In about an hour they returned with ten very hungry little skunks, slightly larger than an ordinary mouse. They were so young that their eyes were still not open, which plainly showed me that they were not nine days old. It was very evident that food was an immediate necessity, if life was to be retained in their frail little bodies.

I mixed a teaspoonful of cow's milk, with two teaspoonfuls of warm water, and added a pinch of sugar to the mixture. Then, by taking each skunk in turn, I opened its mouth and dropped about three drops of the mixture on its tongue with an eye-dropper. This procedure was repeated every four hours, night and day, for three days. By the end of the third day, three had died, but the remaining seven had learned to lap the milk off a spoon, when pressed to their mouths. In a week, they started lapping from a saucer unassisted.

We now commenced to feed them bread and milk, and continued in this manner for about six weeks. Then we gradually added some meat, by giving them a gopher, or some mice, daily. By the time they were six months old we were feeding them on an all-meat diet of gophers and mice. Changing to an all-meat diet had a bad effect on them, which resulted in the death of four. We were now left with only three, so in order not to lose them all we commenced feeding them just like we would feed three little puppies. This appeared to be just what they needed, and we soon realized that all scraps or leftovers from the table were greatly appreciated by them. Sometimes the cats seemed to take a notion that they would like to eat with the skunks, but they soon were given to understand that the skunks were boss, so they minded their own business.

WHEN the boys brought the ten little orphans home, we kept them in a box inside a granary, but after it became a certainty that some of them were going to live, we thought it necessary to get them a more permanent and warmer place in which to hibernate during the long, cold winter months. Accordingly, we constructed a three-foot cubical box. In one end we cut a round six-inch hole, to serve as an entrance. In this box we made a nest of hay and feathers. Next, we placed a 60-bushel grain box on the ground, against the south side of our machine shed. The small box containing the nest was now placed in one

end of the grain box, and the top of the grain box, with the exception of several feet at one end, was covered with heavy tin. Over the part not covered by tin we placed a layer of chicken wire netting, to admit air and light, and also as a feeding pen until winter.

In this home we placed the three remaining skunks, one male and two females. They seemed very happy and contented, until about the middle of August, when the male seemingly became adventurous and started climbing out over the box at night, returning again during the day. Sometimes when I would come home from a meeting in town around 11:00 p.m., I would take a look in their pen to see how they were getting along. They were usually all there, but one night I found one missing, so I gave several low whistles and called, "Come, boy!" Presently he came out of the grain and sat on his hind legs and scratched my trousers with his front feet, as if to say, "Here I am, there is nothing wrong!"

He went out like that several nights, but he was always back in the box in the morning. I thought, "Alright, if you take a delight in running in the grain, probably you are catching mice; so I will not try to deprive you of any pleasure you derive from it." But one night he went out, and he never came back. Then we were left with the two females. I believe that they fully enjoyed staying—at least it seemed so—and for seven years they continued to be the most friendly and interesting pets anyone could wish to have.

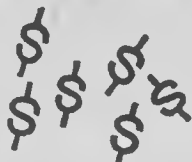
SOMETIMES when we were feeding them, a cat might happen along and jump into the pen. When this happened it was amusing to see the skunks stamp their front feet on the floor and put up a great bluff of defence, as if to say, "Don't touch our food, or else!" The bluff always worked, and after a few looks at them the cats left them unmolested.

They allowed us to handle them in any way we preferred, and after our day's work was over, they sure did like one of us to come and play with them for a spell. Occasionally, when a rainy day stopped us from working on the land, our hired man would say, "I am going to take the skunks up in



The young skunks were fed eventually on a meat diet of gophers and mice.

SAVE



on
**BUILDING
COSTS**
by using

SASKATCHEWAN LUMBER

Your Saskatchewan Timber Board offers the people of Saskatchewan real value in carefully graded, well manufactured lumber in all dimensions and lengths—1 x 2 to 2 x 12-inch, shiplap, boards—siding, flooring, etc. With building costs up, you'll appreciate the savings on lumber prices from the Saskatchewan Timber Board. Write the S.T.B. for a quotation on your requirements.

YARDS AT

MEADOW LAKE - BIG RIVER - PRINCE ALBERT
STURGIS - CARROT RIVER - NIPAWIN
HUDSON BAY

**VISIT THE
S.T.B. YARD
NEAREST YOU**



Head Office: PRINCE ALBERT, Phone 4266

the barn to catch mice;" then away he would go down to their pen, pick them up as if they were cats, place them on his breast, and carry them up into the barn, on top of the oat sheaves. Many times when we went to call him for dinner, we would find him stretched on his back, with the two skunks lying on his breast, and all sound asleep. I don't know what would have happened, if, in his sleep he had rolled over on one of them, but this accident never happened. Quite frequently some of us would pick one up, take her by the hind and front legs, then curl her around our neck and walk all around the yard for a considerable time, with her in that position.

Although they did enjoy playing with a person, they were extremely jealous of each other, especially if one thought the other was being paid more attention than it was getting. Very frequently I would tease them by petting one on the head, and pay no attention to the other at all. It would not be long before the one not being petted would put its nose under my wrist, throw my hand off the other one's head, and try to get me to pet it, by putting its nose on my hand and becoming very affectionate.

I remember one day, while I was teasing them in this way, an auto salesman drove into the yard with a new car. When he saw me down on my knees playing with them in the grain box, he rolled down a window of the car and called to me, "What are you playing with there?" I replied, "Wait till I show you." I picked the two pets up, placed them on my breast, walked

over to the car and leaned far into it through the rolled-down window. When he saw what I had on my breast he appeared very uneasy, but when I withdrew from the car, he turned around and drove away without trying to make a sale.

WHEN the news became general that we had these peculiar pets domesticated, people came for miles to see them. Some, after seeing how harmless they were, took a fancy to fool with them, too. There were others, who would not come near them at all.

All the time we had them, any person coming into our yard would never know that we had a skunk on the place, unless he saw them, or we invited him to see them. Only once did they ever throw their scent; and that was not to be wondered at, because a neighbor with his dog jumped on their den when they were asleep. He wanted them to come out off their bed, but took the wrong way to call them. The only awakening they ever heard was, "Hello. Come on girls."

They finally grew so old that they lost their teeth, and that fall one of them died of old age. The other one lived until spring. She had apparently come through the winter all right, but during the winter the snow had drifted into one end of the box high enough to enable her to jump out. The snow on the outside of the box had melted down, and this caused the box to be too high for her to get back in again. Her tracks showed quite plainly where she had been trying to get back in, but she was too old to jump that high, so we never saw her again. ✓

IS YOUR TRACTOR COSTING YOU TOO MUCH?



If you're not getting at least 350 hours of good working time per year out of your present tractor, then it's not being used to advantage. To be an economical unit, a tractor must be used. And, as you know, it is equally important to have a tractor that meets your own particular needs.

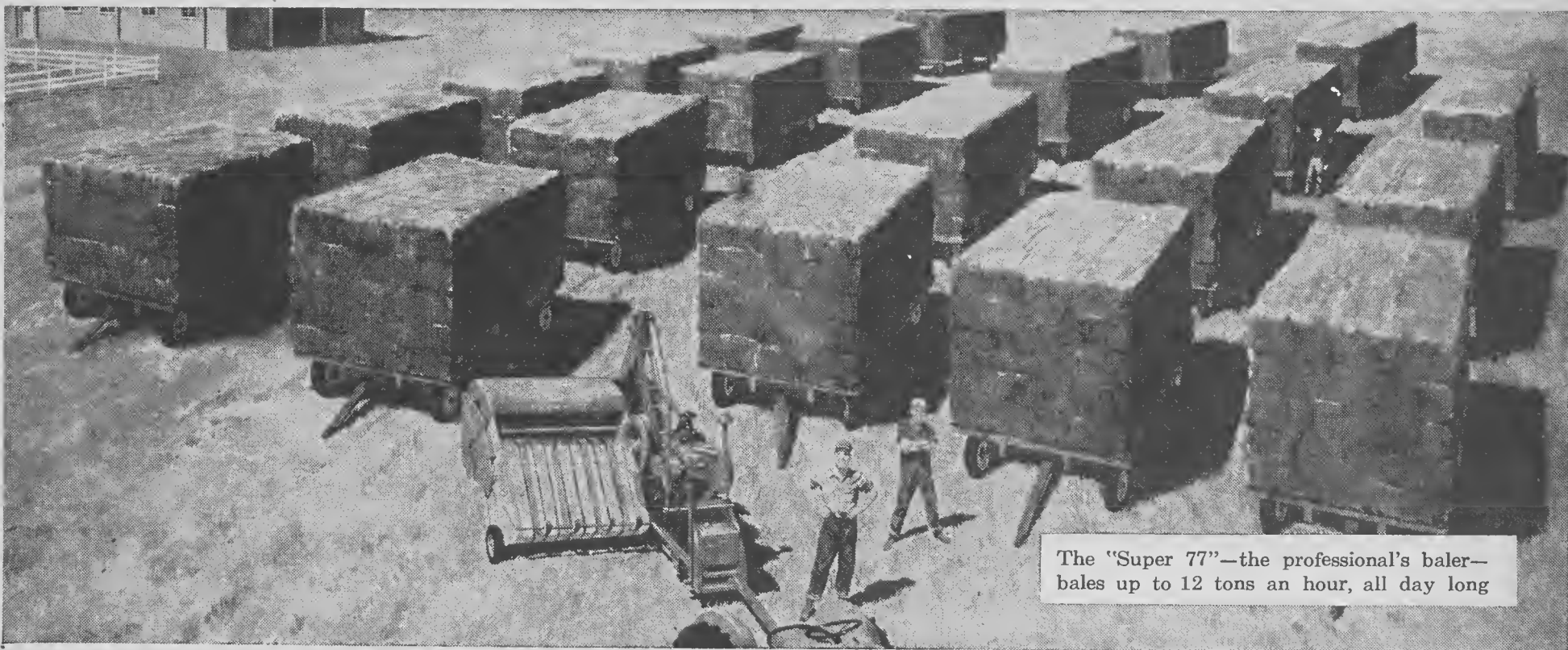
But it costs money to change tractors. And, if this is your problem why not consider a Farm Improvement Loan from Imperial Bank of Canada?

For example, a Farm Improvement Loan can be secured to cover as much as two thirds of a tractor's cost. The simple interest rate is set at 5% and you may have up to three years to repay the loan.

Talk the matter over with your Imperial Bank manager. Have him explain the workings of a Farm Improvement Loan and how such a loan can help you secure the first class equipment you need to run your farm efficiently.

IMPERIAL
the BANK that service built

60-6



The "Super 77"—the professional's baler—bales up to 12 tons an hour, all day long

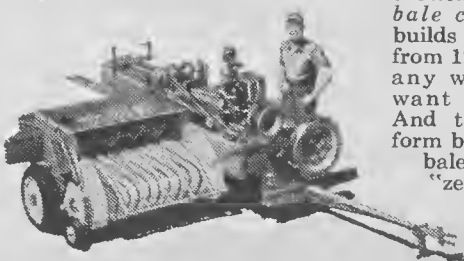
JUST A NORMAL DAY'S WORK FOR A NEW HOLLAND BALER

A pretty sight, isn't it? About 2,000 bales of good, rich hay are stacked on these wagons. Not that you're likely to line up 21 wagons this way, but an average day's work with the "Super 77" could fill 'em.

Ask your neighbours what they think of New Holland balers, family-farm size or this big "Super 77" custom baler. Take a look at them working in fields around you. Then see your New Holland Dealer. He has a complete selection—engine-powered and P.T.O. models—whichever suits you best. One thing's sure, nothing beats the time-saving and convenience of having your *own* New Holland, the baler that keeps going . . . bale after bale, day after day, season after season. You put up better hay, too. New Holland Machine Co., subsidiary of Sperry Rand Corp.

Metermatic control of bale size and weight

The new "Super 66"—America's favourite baler—and the "Super 77" both have the new Metermatic bale control. It builds firm bales from 12" to 52" in any weight you want to handle. And they're uniform because each bale starts from "zero" setting.

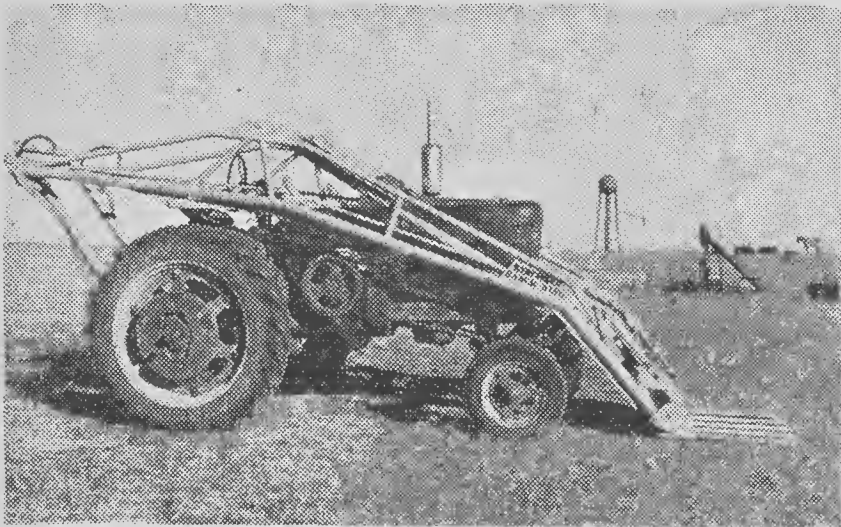


NEW HOLLAND

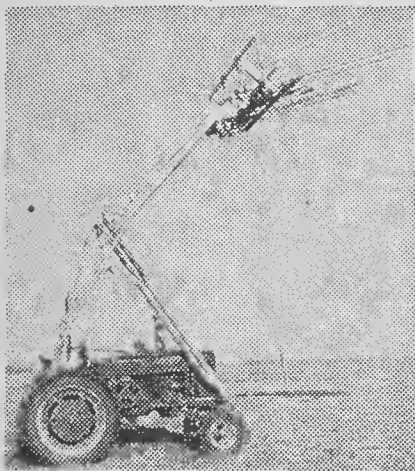
"First in Grassland Farming"

BRANTFORD, ONTARIO

RANCH KING LOADER



A MUCH LOWER, MORE COMPACT LOADER
with 21-foot lift



Look at these Features!

- ✓ A RUGGED, STRONGER, MORE RIGID LOADER.
- ✓ A BETTER BALANCED, SAFER LOADER.
- ✓ NO GADGETS, CABLES, PULLEYS, ETC.
- ✓ FULL LINE OF ATTACHMENTS AVAILABLE.
- ✓ A BUILT-IN 7-TON PRESSURE HYDRAULIC (SELF-LEVELING) PITCH CONTROL THAT IS A HONEY.
- ✓ FITS OVER 50 MODELS OF TRACTORS.

Also manufacture irrigation equipment, land levelers and ditchers.

For further information and prices write, stating make and model of tractor

KIRCHNER MACHINE COMPANY

2005 SECOND AVENUE SOUTH

LETHBRIDGE, ALTA.

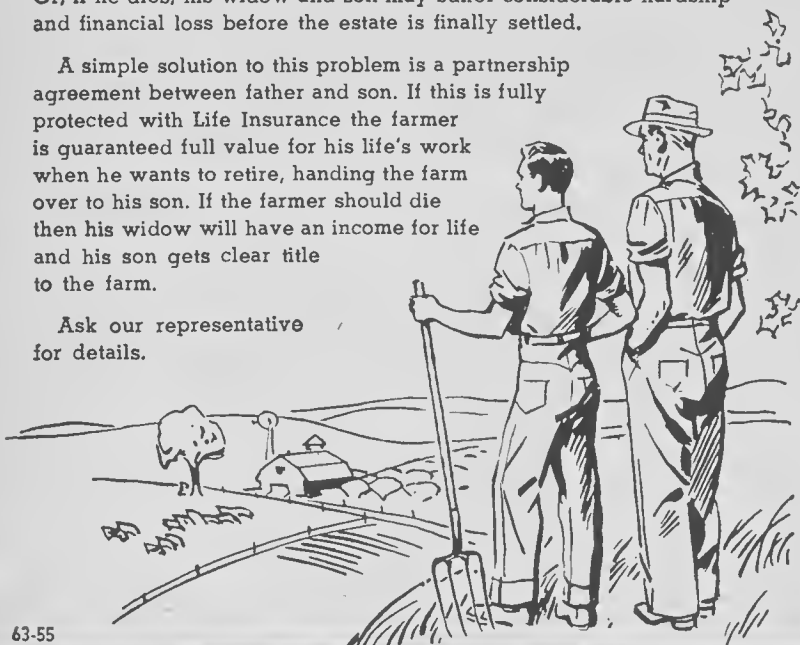
Always make sure that your mail is properly addressed, and that you have signed your name and address to your letter or subscription order. An omission will cause delay in filling your order.

Father & Son— A PROFITABLE PARTNERSHIP

A farmer with a valuable farm but no plan for its transfer to his son usually faces unexpected problems when he wants to retire. Or, if he dies, his widow and son may suffer considerable hardship and financial loss before the estate is finally settled.

A simple solution to this problem is a partnership agreement between father and son. If this is fully protected with Life Insurance the farmer is guaranteed full value for his life's work when he wants to retire, handing the farm over to his son. If the farmer should die then his widow will have an income for life and his son gets clear title to the farm.

Ask our representative for details.



63-55

THE MANUFACTURERS LIFE
INSURANCE COMPANY



The lamb-feeding layout on the S. & T. Ranch, where 1,400 lambs were on feed to prepare for market. A carefully designed weaning system is followed.

Assembly Line Sheep Enterprise

Up to ten sheep per acre can be carried with rotational grazing and irrigation

RAISING sheep on irrigated pastures, long predicted by agriculturists as a "new look" in the industry, was tried this year at D. A. Scholten's S. & T. Ranch on the outskirts of Medicine Hat, Alberta. As the grazing season drew to a close, it appeared that the "down" breeds did better on irrigated pasture than the "range" breeds, although breed has never been noted as an important factor in pasturing tests run at the range experimental stations. However, on the whole, the S. & T. venture was a successful one, and it is believed that up to ten sheep per acre can be carried under a rotational grazing scheme, with adequate irrigation.

An interesting feature at the Scholten ranch is the lamb weaning system, where a number of buildings are used so the ewes and their offspring can be passed through various stages of segregation, until the lambs are ready to go on feed. After the ewes have claimed their lambs, small groups are isolated in pens. As the ewes accept responsibility for their young, and feeding patterns are firmly established, they are housed in larger groups. At the final stage, the whole lamb crop is together in one building.

When the lambs are ready to go it alone, they are treated for worms and inoculated against "over-eating disease." Those destined for breeding purposes go out on pasture, and those headed for an early market have feed hauled to them in special feeding pens.

For the first week the feeders go on a diet of alfalfa hay; then they're given a daily ration of oats. The grain quota starts at about one-sixth of a pound per lamb per day, and in a month's time they are receiving up to two pounds. The hay ration remains fairly constant, at about two pounds per animal a day.

Each morning at 7 a.m. the young feeders are herded into the "dining room," as the pen containing the grain troughs is called. The rest of the time they spend in neat, compact feeding pens, taking their hay from slatted hay troughs that are constructed so they can be easily moved about, and

are designed to handle 25 lambs at a time.

When The Country Guide called, 1,400 lambs were being fed in four pens that held 300 to 400 animals apiece. The lambs were expected to average about 100 pounds for market, then to be shipped away, and the movable hay troughs carted out to the pasture and strung out in a long line for winter feeding of the main flock. ✓

Cows Make Their Own Music

by DON J. MacLEOD

SWITZERLAND has a unique, ancient custom of putting fine-toned bells on their cows. Swiss farmers believe good cows are entitled to good bells.

These cow bells usually are made of a blend of brass and copper, and there are trade secrets that are used to make fine tonal-quality bells. The lead cows and bulls have huge, deep-throated bells; the average cow has a bell about nine inches in diameter and six inches deep. Calves are given lighter-toned, smaller bells. Farmers can detect the location of their own cows by the distinctive tinkle of their bells. The Swiss meadows high in the Alps are becoming noted for their fat, healthy cows and the full orchestration of tinkling cow bells. ✓



"They're feeding."

Which Weed Killer—2,4-D or MCP?

Continued from page 13

four-leaf stage, or the crops were under-sown with legumes, in which cases MCP was better.

The Lethbridge Experimental Farm has found MCP amine less injurious to Topper canning peas than the 2,4-D amine; and MCP amine also caused less injury at Lethbridge, to alfalfa, and red and alsike clovers, when controlling annual weeds.

In Nova Scotia, where the main weeds in cereals are wild radish, wild mustard, lamb's quarters, ragweed and smartweed, practical control has been given by MCP, according to J. S. Leefe of the Kentville Experimental Farm. Although many are using 2,4-D amine in grain without particular injury to the underseeded crop, MCP has been used to a limited extent at Kentville in cereals seeded down with red and ladino clovers and alfalfa, and is considered safer than 2,4-D. MCP has not been safe with canning peas at Kentville, although it is recommended in the sodium salt formulation for western Canada.

THE question of timing is important. Professor Shebeski says that the full competition of weeds takes place very quickly, depending particularly on moisture conditions. The logical conclusion is to spray as soon as possible, but 2,4-D damages oats except at the shot-blade stage, when the weed damage has been done. He be-

lieves that experiments across Canada have proved conclusively that damage from MCP is rare, and it is therefore the safer chemical with the easier-to-kill weeds. If weeds are hard to kill, it is better to grow wheat and barley than oats.

Crop competition studies at the University of Manitoba have shown that as few as ten mustard plants per square yard greatly reduce flax yields, 25 reduce oats, and 50 mustard plants will reduce wheat and barley significantly. In each case, however, early spraying is the most effective.

In the United States, the cheapness of home-produced 2,4-D, compared with imported MCP, is even more marked than in Canada. However, R. S. Dunham, University of Minnesota, compared the two chemicals and came to the conclusion that the cost of MCP was justified in some circumstances. In flax, there was a two-bushel increase per acre when treated with MCP, compared with 2,4-D treatment. Early varieties of oats and barley were more tolerant to MCP; yields of red clover seed were three times as large after MCP as with 2,4-D; and alfalfa bloom was more seriously reduced by 2,4-D. On the other hand, alsike clover showed better recovery at harvest, after 2,4-D, than on plots treated with MCP.

Both are effective against most broad-leaved weeds, but 2,4-D gives better control of Russian thistle, false flax, ragweed, smartweed, redroot pigweed, shepherd's purse, ball mustard and tansy mustard. MCP has been more successful against hemp nettle, horsetail, Canada thistle, stinkweed,

Get MORE SAVINGS

WITH CO-OP

INDIAN BRAND

Fertilizers




CO-OP FERTILIZER for EVERY SOIL!
ORDER NOW for BETTER CROPS IN '56

All recommended types of fertilizer now available from your Co-op.
 Your Provincial Agriculturists will advise you on the type for your soil.

REMEMBER
CO-OP INDIAN BRAND FERTILIZERS

- Increase yields
- Speed maturity of the crop
- Increase straw strength
- Reduce soil deterioration
- Reduce Root Rot damage

You can now get Co-op fertilizers in all recommended strengths

- Ammonium Phosphate 11-48-0
- Ammonium Phosphate 16-20-0
- Ammonium Nitrate Phosphate 27-14-0
- Ammonium Sulphate 21-0-0
- Nitraprills (Ammonium Nitrate) 33½-0-0
- Complete Fertilizer 10-32-10

ASK FOR CO-OP INDIAN BRAND FERTILIZERS

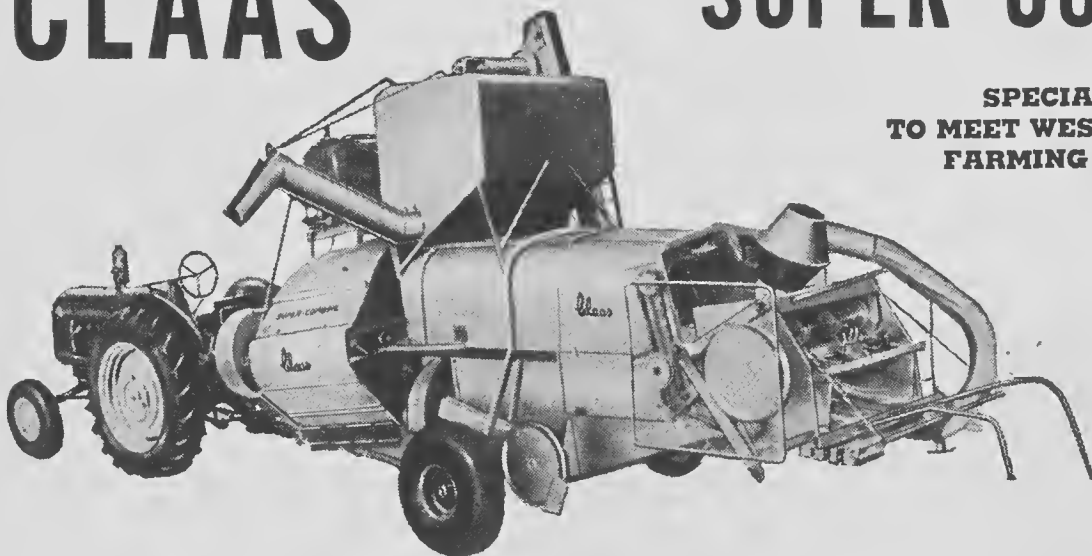
SEE YOUR CO-OP

THE COMBINE WITH BUILT-IN STRAW BALER AND CHAFF SAVER

CLAAS

SUPER COMBINE

**SPECIALLY BUILT
 TO MEET WESTERN CANADIAN
 FARMING CONDITIONS**



HANDY
 BALES



Why waste your straw
 and chaff when you can
 save it?



Benefit from all the features in the biggest combine on the market:

- 50"-wide Cylinder;
- 13' x 4½'-Shaker handles more grain in less time with no grain loss.

Pull type combine harvesters will be accepted as trade-ins.

FACTS TO KNOW: CLAAS Combine customers stay satisfied with this big capacity unit. So much so that it is impossible to buy a second-hand machine.

PARTS—SERVICE: Every CLAAS combine sold has Behind it Enough Spare Parts for Ten Years' Service. Mobile Service Trucks are Maintained. Parts and Service are our Greatest Obligation Once a Machine is Sold.

SAVE STRAW — SAVE CHAFF — SAVE GRAIN — SAVE LABOUR — SAVE TIME!
YOU SAVE EVERY WAY WITH THE CLAAS

FEEL FREE TO WRITE FOR FULL INFORMATION
 ABOUT THESE TWO PROVEN FARM MACHINES



ALBERTA ENGINEERING LTD.
WETASKIWIN **WESTERN CANADIAN** **CLAAS DISTRIBUTORS** **ALBERTA**

Sandhills

"WICK-TYPE"
CATTLE OILER

The SANDHILLS Oiler carries while it oils. Cattle go over or under treating all parts of body. Easy to install! Attach to post, anywhere. Fill with oil and forget it. NEW TYPE PUMP saves insecticides and guarantees even oil distribution with simple set screw adjustment. The 5-gal. oil supply lasts for weeks.

The SANDHILLS "wick-type" cattle oiler also available for manual operation at

\$37.50



WRITE FOR BOOKLET . . .

Automatic Stock Pest Control with New Powerful Insecticide Concentrates that mix with your own water or oil.

AUTOMATIC EQUIPMENT MFG. CO.
PENDER, NEBRASKA

HESSKILL INSECTICIDES



Mix 1 to 20 with fuel oil, diesel oil or petroleum distillate for use in stock oilers. Improves animal's coat. Conditions hair and hide. Also mixes with water to spray for grubs, lice, ticks and mange mites. Also a repellent for flies, mosquitoes, gnats. Economical dilutions 1 up to 160.

DISTRIBUTED BY

WHEAT-BELT INDUSTRIES LTD.

1334 Tenth Ave. W. Calgary, Alta.

DAND'S LIVESTOCK SUPPLIES

Swift Current, Sask.

Other Distributor Territories Open

Write:

AUTOMATIC EQUIPMENT MFG. CO.

Box No. 308, The Country Guide
290, Vaughan St. Winnipeg 2, Man.
5256

SHEAR YOUR OWN SHEEP

with **STEWART** famous
SHEARMASTER

**MORE
WOOL
MORE
PROFITS
LESS
LABOR**



Ideal for the
farm flock, tagging,
shearing wool-
blind sheep.

You make more money when you shear your own sheep—by machine. Hand-blades leave ridges—machine doesn't, so you get 10% more wool by machine and better price for it because of its longer fibre. Easy to learn to shear by machine and remove fleece from sheep in a few minutes. Save shearers' wages. SHEARMASTER has powerful, ball-bearing, fan-cooled motor inside rugged Bakelite hand-piece. Works from light socket 110-120 volts AC-DC. Built-in off-and-on switch. Professional type tension control. Includes long cord, extra comb and three extra cutters. Catalogue No. 31B-2. Has year round use for shearing the flock, tagging, crutching, removing wool from dead sheep, etc.

WRITE FOR BOOKLET "Tips on Shearing." 60 illustrations. Gives step by step, simple routine for shearing wool from sheep, leaving no wasteful ridges.

NOTE: Starting with Shearmaster powerful motor unit, you can add Clipmaster for clipping horses, dairy cows, dogs; Grooming Brush for cleaning farm animals better, faster; Drillmaster for quick holes in wood or metal. All four heads are interchangeable by simply removing two screws.

Sold through dealers.

SUNBEAM CORPORATION (CANADA) LTD.
TORONTO 18

tartary buckwheat, tall buttereup and corn spurry.

THE Agassiz Experimental Farm, in B.C., after preliminary tests with MCP, found it the most promising chemical for control of horsetail. Using 0 to 80 ounces it gave top growth kill of 0 to 100 per cent, with regrowth in the following spring from 100 to 23 per cent. MCP amine and ester sprayed on red clover with oats, at ten ounces, gave effective weed control when the clover was at second true-leaf stage, where the principal weeds were smartweed, corn spurry and lamb's quarters.

With an increased flax acreage forecast this year, there should be more interest in MCP, which causes less distortion and delay in harvesting, than with comparable rates of 2,4-D, says E. V. McCurdy, of the Indian Head Experimental Farm. He also thinks it is safer with cereals and alfalfa.

For seed increase fields, H. R. Ballantyne, at Melfort, found that MCP gave good weed control and was less harmful to the growing crop.

No advantage is seen in using MCP with wheat, barley and corn, according to H. R. Hay, Central Experimental Farm, Ottawa, because these crops are not injured by 2,4-D when the recommended amounts are used. In the western provinces, he says, 2,4-D may injure oats, flax and legumes, so MCP is preferred. Prof. William Corns, University of Alberta, agrees, but feels that MCP may not always give better net results than 2,4-D, in sensitive crops. If difficult weeds are present, or if weeds are past the early susceptible stage, 2,4-D may be needed even at the risk of some crop damage.

One of the disadvantages of MCP is that it may not be as readily obtained as 2,4-D, and farmers become geared to the use of one, and tend to stay with it. The slightly higher cost of MCP, and the fact that 2,4-D has been used successfully for a number of years, tend to make the latter more acceptable. It is also significant that in some areas, southwestern Saskatchewan, for example, 2,4-D controls a wider range of the problem weeds, and it is a more suitable all-round chemical under those circumstances, according to A. Wenhardt, the Swift Current Experimental Farm. Farmers also tend to keep the rate of chemical

sprayed as low as possible, and the kill would not be so good if they started using a low rate of MCP in wheat and barley.

It has been argued that a greater use of MCP, and hence a larger output of it, would reduce its cost. The difference in price, according to Dr. George Friesen, University of Manitoba, using a slightly higher rate of MCP, is 25 cents more per acre than for 2,4-D, but he believes it is worth it. J. J. Sexsmith, Lethbridge, gives the cost of the minimum dosage of 2,4-D in 1955, as 18½ cents per acre, and MCP 37 cents, with the possibility that the price spread may be reduced in the near future. D. A. Brown quotes the cost of 2,4-D ester last year at 30 cents per acre for active acid, compared with MCP at 54 cents; amines 26 and 41 cents.

One chemical company claims that although it costs 25 cents more per acre to treat oats and flax with MCP, it can increase oat yields by 15 bushels an acre, and flax up to seven bushels—or 25 cents to earn \$6 to \$11 extra, or maybe more.

W. J. Breakey, Morden Experimental Farm, draws attention to damage caused by sprays drifting onto fields of susceptible crops. The esters of 2,4-D and MCP are dangerous, but MCP is less dangerous than 2,4-D. The esters are a danger to sunflowers, sugar beets, shelterbelts, garden crops and ornamentals, according to George Friesen.

Because these two chemicals can kill a wide range of plants, it is also essential that all containers and machines used for them should not be used for fungicides or insecticides on susceptible crops, unless the equipment is thoroughly rinsed with a detergent, filled with a weak solution of household ammonia and allowed to stand overnight, and then drained and thoroughly rinsed with water.

The choice between 2,4-D and MCP is not a clear-cut one. However, 2,4-D is cheaper and swifter, and can deal more effectively with Russian thistle and other difficult weeds. MCP is less harsh and less likely to reduce crop yields. It is safer for early spraying, when weeds are more susceptible, and it gives better control of Canada thistle and hemp nettle. The answer seems to be to use the one which meets a particular situation best. ✓

New Look at Performance Tests

WHERE does performance testing of beef cattle stand today? Ontario's livestock commissioner W. P. Watson, who is secretary of the Ontario Advanced Registry Board for Beef Cattle, which has been supervising the testing program begun in 1950, and T. Alex Edwards, also a board member and a well-known breeder of Aberdeen-Angus cattle at Arva, recently brought back some interesting observations from a trip to the United States.

The most important call was at the Pan Tech Farms, a Texas experiment station, and headquarters of the Texas Performance Testing project, which was initiated in 1950. The policy in that state, directed by a committee of five breeders, requires breeders to send at least three, and up to six bulls from one sire to the station, for testing.

Bulls were self-fed a high roughage and low concentrate growing ration (65 per cent roughages and 35 per cent concentrates), which is different from the Ontario ration of two pounds of concentrates for every pound of hay. One week after the conclusion of the test, a sale was held at the station, after the bulls were classified according to type.

Here is Mr. Watson's description: "In the afternoon, 117 Hereford and 14 Angus bulls were sold by public auction. Apparently the bulls which had the poorest records from the standpoint of rate of gain or type were withdrawn or disqualified. When each bull came into the ring, its rate of gain and type classification were announced. The top price of the sale was \$1,135 for a Hereford bull that graded fancy minus (the second highest grade), and gained 353 pounds, or 2.52 pounds per day, during the test period. The bidding was fairly spirited for bulls with satisfactory performance records and of good type.

Here are some conclusions Mr. Watson brought back from the trip. Breeders and farmers throughout the United States are intensely interested in performance testing. They do not view it as a cure-all, but recognize it as a means of correcting some of the faults in purebred herds.

He has recommended the Ontario A.R. board to consider the use of a more economical ration, containing more roughages and less concentrates. Since breeders use the results of testing as a means of sales promotion, tests should provide an equitable basis for comparison, with home tests receiving less recognition than station tests.

Farmers still like bulls of good type and conformation, says Mr. Watson, so performance testing should be used to supplement the methods presently employed for selection, rather than to replace them. ✓



Hon. L. C. Halmrast, Alberta Minister of Agriculture, presenting the Grand Bull Championship to Peter Secord, Winterburn, at Edmonton Futurity Show.



From Hens to Henry

Continued from page 10

stance, when having dinner at our place, knowing well that our people originally were from the Highlands of Scotland, he would compliment the Better Half on a good dinner, and discreetly mention his grandmother on his father's side, who had come from the Highlands. When visiting our German neighbors, he would have a grandfather on his mother's side who was from Hanover. I even heard him intimate to a Sarcee Indian, with whom he was trying to make a horse deal at one of the local stampedes, that one of his ancestors, his grandmother on his mother's side, had been a relative of Sitting Bull.

This, however, was Oliver's first visit to my place. It was too dry and hard to do anything with the summer-fallow, and same for fencing. So I was half-heartedly repairing old worn-out farm machinery when Oliver drove into the yard.

It was near dinner time, and, as is the usual prairie custom, the team was put in and fed some of the remaining prairie slough hay. While we were waiting for the noon summons from the Better Half, we made a rapid voyage of discovery and appraisal under Oliver's astute and discerning leadership. We took in the various scrap piles, machinery, both in use and discarded, the henhouse and the workshop. Dinner was then ready on a summons from the kitchen.

The meal concluded, we were once more in the barnyard, looking for some sign of the rain clouds which were not coming, when the thought struck me with overwhelming conclusiveness that Oliver should have two or three hens to help out with the family larder. Strange to say, in a half hour's time Oliver was the owner of four laying Rock hens, one setting hen, and one of my purebred roosters. I had become the owner of a shovel, a pick, and a hammer, all undoubtedly with a very considerable degree of railroad experience.

SEVERAL weeks passed. One evening, as I drove by Oliver's place, I noticed a milk cow, a young calf, and what appeared to be a yearling heifer in his pasture. Our local telephone line was a very convenient and entertaining link in the social life of the community, and before long the full details of the complicated project became public property.

It appeared that Jim Edmonds, a neighbor of Oliver's had inherited some money, with which he bought a gasoline tractor in almost new condition. Included in the deal was a second-hand combine and one or two tractor implements. Jim's idea was custom work after he had finished on his own half-section. Looking after and milking a cow took time, so Oliver was to keep the cow for one year, supply Jim with a quart of milk a day, also what eggs he needed. Oliver was to own the yearling, but was to put up ten tons of hay.

But also involved in the transaction was the lease on the Watkins slough, which was to be turned over to Oliver for ten tons of hay a year. Now this slough had been a keen disappointment to Jim Edmonds. Years ago, in the homestead days, old man Watkins, who had been living with his son a few miles west, filed on this big slough

for hayland—homestead and pre-emption—, only to be bitterly disappointed. The large slough, about 300 acres in extent, only yielded hay under certain very rare conditions. First, there had to be sufficient snow in the hills, in the drainage area south, to supply runoff water to fill the slough and make the hay grow. Then there had to be an intense dry summer so that the water would dry out. Once in Watkins' life as he proved up on this particular property, the water dried out, and everybody in the neighborhood went in with him to put up hay. A sudden very heavy downpour in the hills and the depression flooded up again.

Eventually, the land went back to the provincial government for taxes. Then Jim Edmonds had leased it, hoping that he would have some luck with it. Always either too wet or too dry!

Once, however, conditions were right and Jim and the neighbors went in and cut the hay, got it stacked and made fairly safe against showers. A man on horseback evidently stopped to eat lunch on the south end of the slough, accompanied by some hounds. He was probably hunting coyotes. A short time after he left, smoke arose. We all rushed to the scene. My wife, on a high hill in the vicinity, counted 67 large stacks of hay, all of which went up in flames and smoke. Everybody had the Watkins slough down as being hoodooed. So now Oliver Wishmore was going to try his best on this particular land; and of course we all prophesied failure and tough luck for the newcomer. Early in August we had a visit from Oliver; this time not to trade, but to borrow a level. I had forgotten that I had two of them in the workshop. But Oliver's keen eye

had noted this, too, one hidden behind the other. The Highland Grandmother was duly commented on, and followed up by a request that I lend him my level. In return, he offered me the use of his rope-making machine, which I had talked of using.

"What was he going to build with the use of the level?" I asked. But there was to be no building.

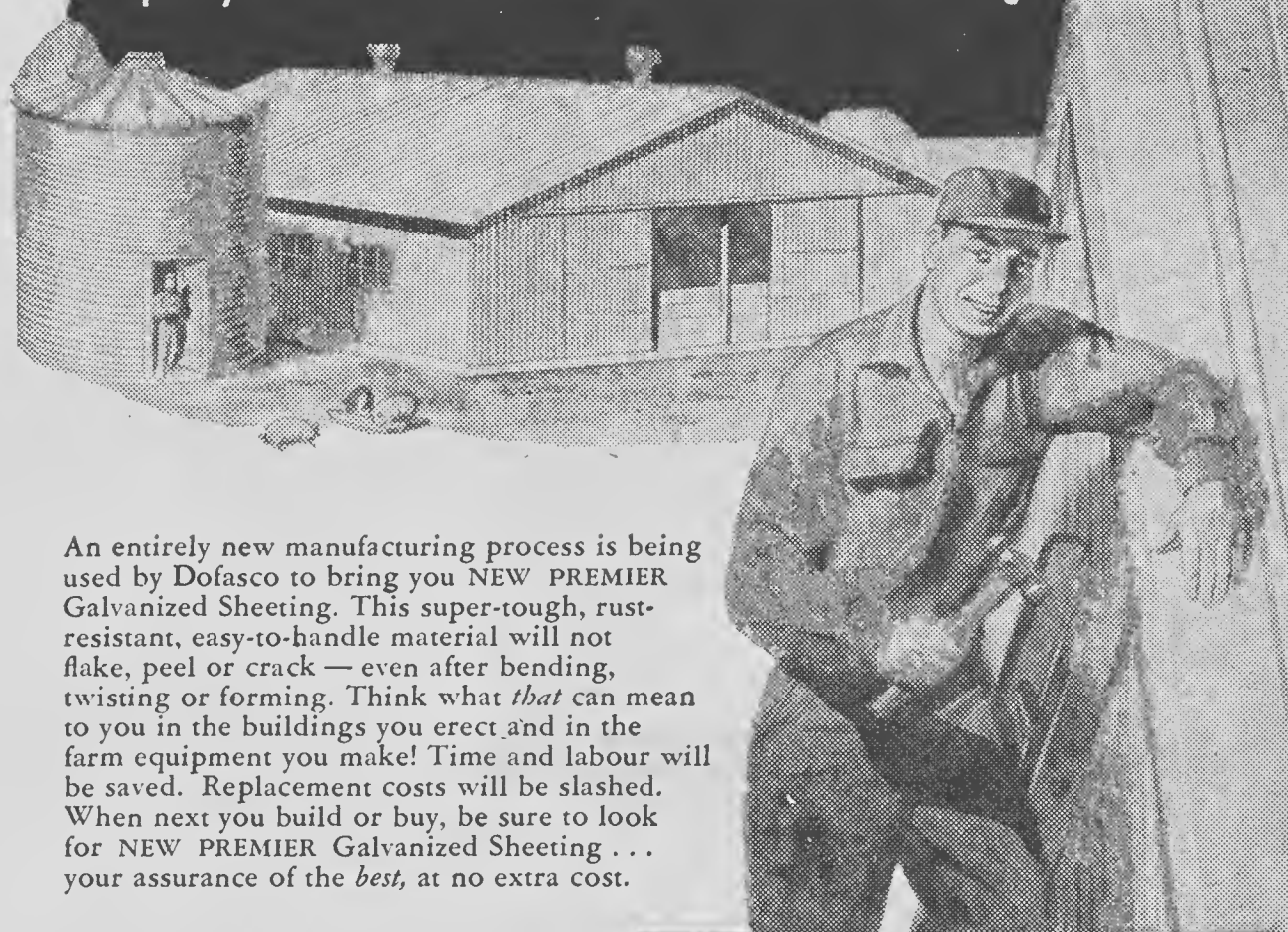
"I am going to take some levels of that big slough," he replied.

"What for?" I asked, curiously.

"Oh, just to see which way is down," he came back, laconically.

LATE in August we had a meeting of the whole community, called by the local of the United Farmers of Alberta, to consider the question of taking over co-operatively, that portion of the local telephone system, then owned by the government of the

For STRONGER, LONGER-LASTING BUILDINGS and EQUIPMENT . . . specify low-cost NEW PREMIER Galvanized Sheeting



An entirely new manufacturing process is being used by Dofasco to bring you NEW PREMIER Galvanized Sheeting. This super-tough, rust-resistant, easy-to-handle material will not flake, peel or crack—even after bending, twisting or forming. Think what *that* can mean to you in the buildings you erect and in the farm equipment you make! Time and labour will be saved. Replacement costs will be slashed. When next you build or buy, be sure to look for NEW PREMIER Galvanized Sheeting . . . your assurance of the *best*, at no extra cost.

TOUGH, WEATHERTIGHT

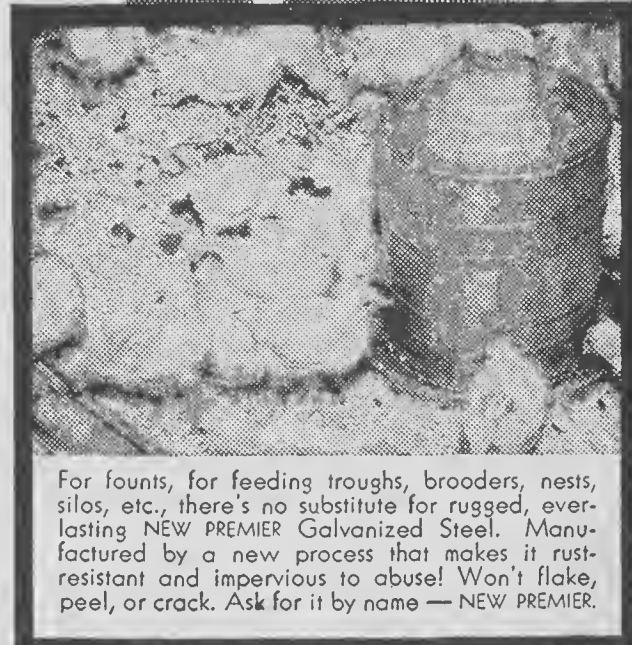
Builders will tell you . . . NEW PREMIER Galvanized Steel gives you the most rugged, weatherproof protection that money can buy . . . *anywhere!*

EASY-TO-HANDLE

No special tools or skills needed to build with NEW PREMIER Galvanized Steel . . . and it's available in a wide range of sizes and gauges.

FIRE-RESISTANT

Build with NEW PREMIER Galvanized Steel and sleep assured that your livestock, grain, and stored materials are receiving the best in protection.



For founts, for feeding troughs, brooders, nests, silos, etc., there's no substitute for rugged, everlasting NEW PREMIER Galvanized Steel. Manufactured by a new process that makes it rust-resistant and impervious to abuse! Won't flake, peel, or crack. Ask for it by name — NEW PREMIER.



GALVANIZED STEEL

FREE PLANS!

dozens of
designs
to choose
from

VISIT your building materials dealer, or write:
International Panel Boards Limited,
Dept. MI, Gatineau, Que.
Please send me FREE PLANS checked.
☐ AFB-212 ☐ AE-280
☐ Also, please send FREE FOLDER showing
many other ideas and plans for farm and home,
using MASONITE Tempered Presdwood.
NAME.....
ADDRESS.....
COUNTY..... PROV.....
(Please print in block letters)

You'll build them BEST with GENUINE

MASONITE

TEMPERED PRESWOOD

IN NATURAL OR GREY "PRIMECOTE" FINISH

TEMPERED

for surface durability!
for added rigidity!
for smoother paint finish!

POLE-TYPE BARN

No foundation needed . . . no involved carpentry work . . . lower cost. Long wearing, weather-defying MASONITE Tempered Presdwood goes up fast on framework of pressure-treated creosoted poles.

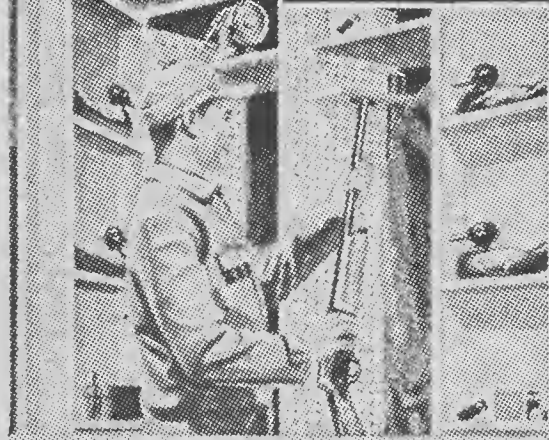
Ask for Plan AFB-212.



... in the home

**MASONITE
PRESWOOD**
solves
maintenance
problems

... around the farm



SPORTSROBE

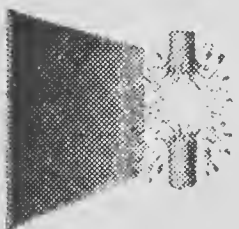
Handiest way yet to store fishing and hunting gear. Easy-to-build Sportsrobe of MASONITE Tempered Presdwood, with smart Perforated Panels for ventilation and hanging things with special fixtures. Ask for Plan AE-280.

OTHER MASONITE BRAND PRODUCTS INCLUDE

Standard Presdwood	• Presdwood Temprtile	• Leatherwood
Square Tile	• Paneline Plank	• Panelwood
Floor Underlay	• Quarterboard	• Tempered Flooring

MADE FROM EXPLODED WOOD!

MASONITE Presdwood Products are made by exploding wood chips into fibres, refining and pressing them into dense, rigid hard-board panels in heated hydraulic presses. Fibres permanently bonded with lignin, the tree's natural "glue" agent. Presdwood is wood made better!



"OUTWEATHERS THE WEATHER!"

province, but in process of transfer from the government to local ownership.

We were all there, including Oliver. This proposal had been talked over for several months. The main problem was money. Times were terrible. Nobody had any money, or credit. Many were on relief. But we all wanted, and needed, the telephone. We would have to get more poles, as some new lines would have to be built. Nobody had any solution. Finally Oliver spoke up. If you people will all come back here this coming Friday night, I think I can get you some telephone poles and some wire too.

Well, we had no solution to our problem. We knew Oliver had no money or at least very little. Maybe he could find a way out. So after some more discussion we adjourned the meeting.

ON Friday evening we were all at the schoolhouse, the women folks, too. Curiosity was at a very high pitch. Now, said the president, after he had called the meeting to order: "We will now have a report from Mr. Wishmore, to see if he has any poles and wire for us."

"Well, Mr. Chairman, in the first place, I want a telephone just as badly as any one of you people. About three weeks ago, I heard of a man away up northwest of here, who had acquired a lot of old used telephone line going into an abandoned coal mine up there. I knew that one or two sales of wire and poles he thought he had made, had fallen through for want of money. So I told him first thing that I wanted both telephone poles and wire; that I had no money, but that as he was Irish and one of my grandfathers on my father's side was Irish, we would likely get together.

"At the time we got there he was trying to lift a granary to get a cement foundation underneath it. He was trying to do it, using long popples as pries, and breaking them in the process. I had two of my railroad jacks in the wagon. I took them out, and before dinner we had the building up in its place and he was in real good humor. However, he was a real, hard dealer.

"Well, I have enough old poles and wire to finish your line here. We will have to haul them 30 miles. Now, to make this deal I had to give one of my horses, so one of you people will have to lend me one, or trade. I also gave that yearling heifer, one of my best railroad jacks, ten dollars in cash, one dozen Roek ehickens, and I must go over and stook three days, as he will have some wheat to stook. Now that's the deal.

"Now here's what I want first. I want three of you young fellows to go over with me so that the four of us can make a short job of the stooking. Teams can be taken along to haul home the poles and wire. I want a horse to replace the one I dealt off. Then, next year, when I get a crop of hay off the Watkins slough, I want each one of you 25 farmers for a day's cutting, or raking hay, and a day stacking. We are going to fireguard the hay this time, and then I want the promise of a day's hauling for each one, not to exceed a 25-mile haul. If there is no hay on the slough next year, we can meet and talk over something else."

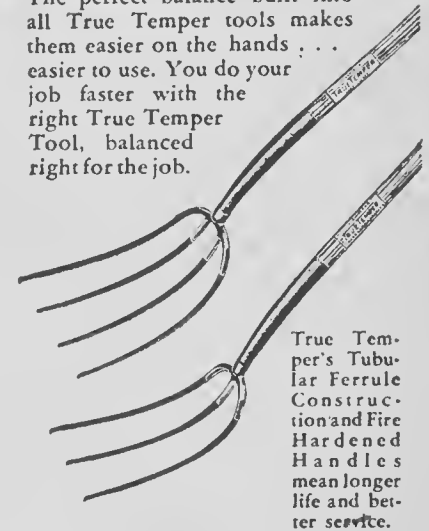
THE
SECRET
IS IN
THE
BALANCE



TRUE TEMPER TOOLS

ARE BALANCED RIGHT
TO MAKE YOUR JOB
EASIER

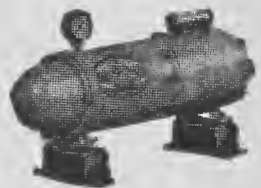
The perfect balance built into all True Temper tools makes them easier on the hands . . . easier to use. You do your job faster with the right True Temper Tool, balanced right for the job.



AT YOUR HARDWARE STORE

Made in Canada by

WELLAND VALE



"YOU'LL LIKE
THIS NEW KIND
OF PUMP!"

Think of it! A dependable home water pump that's so utterly simple it requires no attention at all—never needs oiling or greasing! Now you can have all the water you want merely by turning a faucet.

NO OTHER PUMP LIKE THIS

The amazing rotor-stator pumping principle is a 10-year success on industry's most difficult uses. It self-primers; creates a nearly perfect suction vacuum; discharges in continuous flow at positive pressure; lasts indefinitely, even when pumping sand and silt. There's just one moving pumping part—and only one pipe into ground.

SEE FOR YOURSELF

WRITE TODAY FOR FREE FOLDER

ROBBINS & MYERS Co. of Canada Limited,
Morrell Street, Brantford, Ontario

Please send me free Folder 1953G

Name.....

Address.....

City..... Prov.....

Oliver sat down. "Well, there it is," said the president. "What's your pleasure?"

Well, we had no money. There were the telephone poles and wire that we needed. We didn't believe that Oliver would get hay off the slough, but that would give us a year to work out something else. So it wasn't long before we all agreed to take up Oliver's deal; and very soon personnel was selected and arrangements made to do all the work in connection with the telephone lines and soon, as we didn't have even that very little harvest to take care of, the poles and line were all connected up on the new co-operative phone line, with 26 subscribers.

IN October, I had another visit from Oliver, including the return of my level, and a meal, with the usual complimenting reference to my wife's cooking and to the Scottish ancestor. This time Oliver did not particularly want to trade anything, or even to borrow. His main objective was to secure information.

"Jack," he said, "what about the Prairie Farm Rehabilitation Act, or P.F.R.A.?" So I explained to him the work of the federal government scheme in building dams, dugouts, irrigation and drainage projects in western Canada, for the purpose of rehabilitating some of the severe drought-stricken area of the Great Plains.

"I think that will work for me on the Watkins slough. I found out, by using your level, that a shallow ditch less than a half-mile long will drain the slough dry. Then a four-foot dam with a gate, will hold the water with the slough full. My plan would be to hold the water from the spring run-off until about May 24. Then let all the water drain to the creek, by opening my dam gate, after the slough bottom has had a good soaking. That way we don't need a dry year to cut hay on that slough. All we will need is snow on the hills. Do you suppose we could get it done this fall? Everything is nice and dry.

"It's pretty late," I said, "but let's get to town and see what we can do."

Luck was with Oliver. Summer work, both P.F.R.A. and ordinary road work, was pretty well finished. Surveyors and crews were not busy.

Farm Comment



(Eva Luoma photo)

"Wal! Britain's stayin' out of that wheat agreement again, the boss says. Tryin' to git good will the hard way, seems to me."

Plenty of horse equipment, men, horses and mules were available. Everybody was anxious to get a few dollars to help buy groceries, coal and winter clothes. Before the frost struck, the drainage ditch was finished, and the small dam was built. And then, to finish off, about a foot of snow fell on the hills. So, after all, Watkins slough might grow a crop of hay. But after you have hay? If you get it, there is still the problem of turning it into folding money.

Winter came, with storms, snow, frost and some blizzards. All of these put some cramp in Oliver's trading activities. But all the time his reputation grew. We were all now enjoying our telephone connection, which we now owned ourselves. We had our little Local U.F.A. meetings. There

was the round of Christmas concerts in the various schoolhouses. January came and went, the days got longer, and with spring came another calf from Oliver's borrowed cow and a fresh supply of milk.

The calf, with some of his remaining tools and \$15 in cash, made the major payment on another cow, so now there was the possibility of revenue from cream. In our home there was a very small separator, which we used in our own pioneer start. In a number of small and intricate financial deals too complicated to be dealt with here, Oliver became the owner of this machine, so there could be some money coming in from the sale of cream to the local creamery.

The snow melted, with the warm breath of spring. A heavy run-off came

**OVER
25
USES**

**Modern Sun-Mastr
ROTARY MOWER**

MOW pastures, grass, weeds.
SHRED stalks, stubble & prunings.
CUT brush & briars. MULCH weeds, leaves



NEW LOW PRICES

EXTRA STURDY.

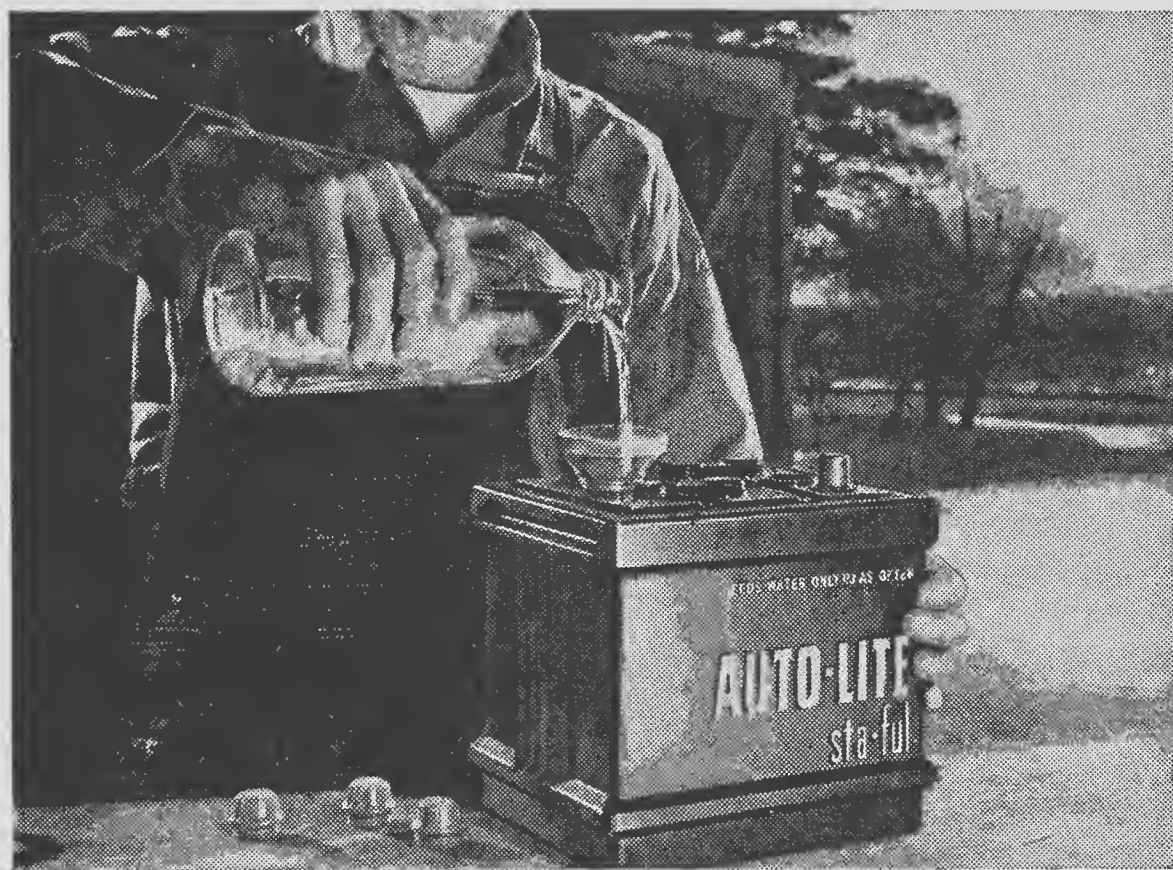
Costs so little you can't afford to be without. Soon pays for itself. Many exclusive features. A nation wide favorite. Models & sizes for all tractors.

FREE BOOK Write today. Include name of tractor.

SUNFLOWER INDUSTRIES, INC.
140-C SOUTH KANSAS AVE., OLATHE, KANSAS

**When Writing To Advertisers
Please Mention The Guide.**

How to get NEW POWER RESERVE for your farm



Keep a spare Dry-Charged Auto-Lite Sta-ful Battery on hand for every emergency!

Get a new Dry-Charged Auto-Lite Sta-ful Battery NOW. Have it ready to go in minutes when you need it! This spare Dry-Charged Auto-Lite Battery assures starting performance at all times for your truck, tractor, automobile, or other equipment. In case of emergency you are protected against costly delays that can hurt the profitable operation of your farm.

Dry-Charged Auto-Lite Sta-ful Batteries are factory-fresh and fully charged. They can be stored indefinitely until needed. Then you simply add the power-producing fluid that comes with the battery.

and it needs water only 1/3 as often

Dry-Charged Auto-Lite Sta-ful Batteries need water only 1/3 as often as ordinary batteries. Extra liquid capacity above the plates gives that extra safety factor. And Dry-Charged Auto-Lite Batteries have extra-heavy container construction and fibreglass insulation for longer battery life in the hardest service.

Ask your Auto-Lite Dealer for a super-dependable Sta-ful Battery, 6 or 12 volts.
Standard or Dry-Charged — it's the world's finest.

AUTO-LITE

**sta-ful
batteries**

Auto-Lite manufactures over 400 products, including Spark Plugs, Batteries, Wire and Cable, and Automotive Electrical Systems . . . sold throughout the United States and Canada.

NEW ROOFMASTER ASPHALT SHINGLES



BP ROOFMASTER Asphalt Shingles — a patented product of Building Products Limited — are the outstanding advance in roofing in years.

A DIFFERENT BEAUTY... BP has added something extra to the ordinary square butt shingle—and thus evolved the extraordinary **ROOFMASTER**. Here's how... First, a lane of dark-coloured granules is incorporated in the underlay surface to form an eye-appealing, continuous *shadow-band*. Then an **EXTRA LAYER** of asphalt and rock granules is built-up on the "finished" shingle to create a unique *grained pattern*. The exclusive shadow band and the grained pattern transform the standard shingle into one that has a *different, unprecedented beauty* — the **ROOFMASTER**.

DURABLE, ECONOMICAL... The **EXTRA LAYER** also means built-in rigidity, tremendous durability, extra weatherability — factors that add up to amazingly increased protection. And yet **ROOFMASTERS** cost no more than ordinary shingles!



ROOFMASTERS come in a wide range of modern colours. See samples at your BP dealer's or write for free colour chart to: P.O. Box 6063, Montreal, or P.O. Box 99, Winnipeg.

BUILDING PRODUCTS LIMITED
Canada's Largest Manufacturer of Asphalt Shingles

Helpful Suggestions for solving many farm problems are found in every issue of *The Country Guide*.

FREE!

1956 48 PAGE
CATALOG

with
FIX-IT-YOURSELF
section

NEW AUTO PARTS and ACCESSORIES
Largest Stock in Canada

- TRACTOR PARTS
- TRUCK PARTS
- AUTO PARTS
- IGNITION PARTS
- SEAT COVERS
- REBUILT MOTORS
- BEARINGS
- MACHINE SHOP SERVICE
- SPRINGS
- MUFFLERS
- GASKETS
- PISTONS
- RINGS
- VALVES
- AUTO GLASS

TRIANGLE AUTO STORES
Operating **Empire Auto Supply Co.**
Dept. CG-5 or Dept. CG-6
271 Fort St., Winnipeg 1832 11th Ave., Regina

**Don't try
half measures!
Use the
BALANCED
Bovine Purgative.**

Dr. Bell's

CATTLE CATHARTIC

Generally Speaking...

no matter how big or how wealthy an advertiser, he cannot afford to advertise a poor quality product. The advertiser's name or his brand on a product is your assurance that satisfaction is guaranteed.

pouring down from the hills. The Watkins slough filled up to the brim and, that was that. Well, we said, "That has happened before. Let us see the rest of it." We started on the great work of getting our spring wheat, oats, and barley, in the ground.

CAME the 24th of May and time for Oliver to open up the gate of his dam. Up came the planks, down went the water with a rush in about four days and the water was drained out and tiny green shoots of grass were showing up all over the black, muddy bottom of this miniature lake. Came the month of June and lots of green grass over two feet high. July came, with some rain and long hot days, and the blue joint was over five feet high.

A beautiful sight! We were all feeling better. This was one of the years in which we got a few local showers. If the hail and the frost and grasshoppers and a few other things stayed away and we got a little more rain, we would all get a little wheat. Oliver had borrowed and traded himself into small quantities of seed—wheat, oats—so he had about 40 acres of wheat and about 30 acres of oats, all looking fairly good. One year since his arrival and he was actually farming,—but still the deals went on. Stampede time in early July came and went, and haying was near at hand. At our local farmers' meeting on the evening of the 12th of July, Oliver got up in the meeting and pointed out that we had had our telephone now for nearly a year. "My hay is ready to cut now," he said. "How about our deal?"

"Yes," our president replied, "Mr. Wishmore has carried out his part. Now it is up to us to carry out our part. Let us all get ready tomorrow, pull over to Watkins slough next day, and cut the whole thing. We must agree on which of us is to take mowers and rakes. Let the hay lie over the weekend, and then bring over our bucking poles, and stack it Monday and Tuesday."

So, for the next five work days, Watkins slough saw the whole community gathered there. As many as 30 and 35 teams cutting, raking and later stacking hay, and then it was done. We stepped off the stacks for lunch and made a rough calculation. "At least 450 tons," said Pat Seymour, the president, and a man of judgment.

Then Oliver Wishmore got up with his back to a big stack of hay and made a little speech.

"You fellows have more than done your part of this game. So count out 100 tons of this hay for the 25 of you who have done this work. I am going to keep about 30 tons for myself. Let us get this hay home before another fire comes along. I still have a little bet to settle with Jack Sutherland about working five hens and one rooster into a better car than his Model T.

"Tonight, I am going down to Jim O'Keefe's place. He has a lot of cattle, and not very much hay. He has two cars, not Model T's, but Model A's. Tonight I am going down to see him. With this hay here, who says I won't be driving home with one of Jim's Model A's?"

That was the end of Oliver's speech, but the next year I had to buy the gas, as both of our Fords headed for the Calgary Stampede.



[Guide photo]
W. J. Valliere, Unionville, tells Frank Brumwell, Gormley, about hog scheme.

Selling the Market Board Idea

ONTARIO'S hog producers have never learned as much about selling hogs, as they did last month. April was the month of the door-to-door canvass; in effect, a barnyard blitz, when just about every hog producer had a salesman knocking on his hog pen door.

But it wasn't hogs these callers were selling. It was an idea. They were volunteer canvassers,—hog producers themselves,—calling on neighboring hog producers in the massive information campaign set up by the Ontario Hog Producers' Association, the Ontario Federation of Agriculture, and other interested farm groups.

Some 5,000 campaigners knocking on the doors of about ten hog producers each, told close to 50,000 producers everything they could about the Ontario Hog Producers' Marketing Board, and signed up a good many of them as members of the Ontario Hog Producers' Co-operative.

They urged hog men to support the selling agency idea, where the farmers' own representative sells the hogs. They explained the job that the agency has done to date, and passed out pamphlets describing the program in detail. They distributed a special pamphlet as well, prepared by the Ontario Department of Agriculture, calling for more grade A hogs at a time when housewives have absolutely rebelled at the thought of buying fat pork, and when lardy hogs have been a factor in floor-level hog prices.

Why such a campaign by Ontario's farm groups? Just this, say the leaders!

"Ontario has compulsory legislation for its marketing board. But if that legislation hasn't the support of the people whom it covers, it isn't of any use. We want all our hog producers to be fully informed about our objectives and accomplishments, so that they can judge it for themselves."

They admit that the time was not ideal to show the selling program in the most favorable light. Prices had finally sunk to the floor, just before the campaign started. But the Co-op claimed considerable credit for maintaining the price above that floor for many weeks. And again, the distressed prices represented a challenge to producers to work together to improve the situation.—D.R.B.

Correction: Some confusion may have arisen over the statement in "Other Uses For Prairie Acres," which appeared in the February issue of *The Country Guide*, to the effect that forage seeds are recommended to a limited extent in Alberta. The recommendation referred only to forage seeds as *alternative* crops. Alberta already produces more forage seed of most such crops than Manitoba and Saskatchewan combined.

Announcing the mighty **INTERNATIONAL W600**

Diesel or Gasoline



NEW BIG POWER FOR THE BIG ACRES

Here are new power and traction for your big implement hook-up. New capacity to multiply the acreage worked in a day. New savings in manhours and operating costs.

New handling ease, including vastly improved manual steering or optional power steering.

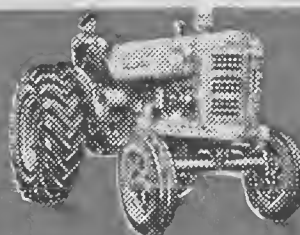
New operator comfort and conveniences including new adjustable, swiveled foam rubber seat with hydraulic shock absorbers. New, roomy platform area where operator may stand, with seat swung to the side. New, crown-type rear fenders and complete cowl shielding to keep dust and dirt from operator area.

Gasoline—or Diesel with new coldest weather starting efficiency.

Prove to yourself how much easier and better it is to farm with a big, power-packed, feature-packed International. Your IH Dealer is the man to see, **now**.



From new larger headlights, to new big platform area and roller-type swinging drawbar, the new W600 is designed and built to handle your biggest jobs easier, faster and better than ever before.



International W400

DIESEL OR GASOLINE

Choose from ten speeds forward . . . match speed to the load exactly with International W400 and Torque Amplifier drive.

Try Power Steering — Hydra-Touch — completely independent pto — new double-disc brakes — and a host more tractor improvements and refinements packed into the International W400.

THE Country GUIDE

with which is incorporated
THE NOR'-WEST FARMER and FARM AND HOME
Serving Canadian Farmers Since 1882

VOL. LXXV

WINNIPEG, MAY, 1956

No. 5

International Wheat Agreement

A NEW three-year International Wheat agreement will come into effect on August 1 this year, if the countries represented at the recent international conference ratify it in time. It will involve allocations among the exporting countries totalling about 302 million bushels, and will operate under a maximum price of \$2.00 per bushel, and a minimum price of \$1.50. In addition to the United States, Canada, Australia and France, the four exporting countries who are members of the present agreement, two new exporters, Sweden and Argentina, will share the reduced quantity.

From the time the International Wheat Conference first convened at Geneva, Switzerland, on February 20, until agreement was finally reached at an adjourned conference in London on April 21, there were several periods when it was difficult to foresee a successful conclusion to the negotiations. Britain, the world's largest wheat importer, plunged the conference into gloom on the first day, by virtually refusing to enter into a new agreement, unless satisfactory steps were taken to deal both with wheat production policies and surplus disposal. That an agreement was finally reached was due, in no small measure, to the skilful negotiations of the Canadian delegation, and to strong support given to the idea among some of the more important European importing countries. Britain's attitude seems to have been substantially governed by a reluctance to return to a policy of government control. She had apparently made up her mind before the Conference convened that she would refrain from joining in any agreement, thus continuing her present policy, begun in 1953 when the current agreement was reached.

Most of the importing countries obviously expected a new agreement to be signed, if at all, at maximum prices substantially lower than the \$2.05 provided in the current agreement. According to earlier press reports, the United States had anticipated something in the nature of a one-year agreement. Canada had little use for such a short-term agreement, and certainly was not prepared to accept any marked decline in the maximum price. Canadian wheat growers are strongly favorable to an international wheat agreement, but they also remember the Canada-U.K. Agreement of 1946, and the second International Wheat Agreement of 1949. The farmer advisors to the Canadian delegation knew full well that Canada would be expected to adhere to any maximum price stipulated in an agreement, but they knew also that the same degree of adherence was not to be expected from all importing countries, with respect to the minimum prices stipulated. If there is not less honor among importers, there are definitely more expedients available to them.

Undoubtedly, the most important reason why little more than a third of the wheat now entering into international trade is to be committed under the new International Wheat Agreement is that many importing countries hope to profit from U.S. give-away, or currency-exchange wheat. As of February 29, the U.S. Commodity Credit Corporation had \$8.9 billion invested in farm price support operations, which involved a net realized loss, during the eight months since the opening of the crop year on July 1, 1955, of \$608.7 million. These operations included 1,119 million bushels of wheat.

Gratifying features of the discussions were: that the United States delegation was apparently ready to follow the wishes of the Canadian delegation as far as possible; and that during the negotiations the Minister of Trade and Commerce, Mr. Howe, was likewise prepared to accept in large measure the views of the farm advisors to the official Canadian

delegation. Certainly the new agreement is a disappointment to Canada, not only because the total quantity committed is so small, but her own allocation—102 million bushels—is the smallest ever. Nevertheless, it would have been a great disappointment to thousands of prairie farmers had no agreement been reached.

After all is said and done, it should be remembered that any difficulties experienced during the Conference were symbolic of the difficulties facing farmers during recent years. Post-war food supply and shortage of dollars in importing countries, the unexpectedly rapid technological advances in almost all of the Western world, the unprecedented crop bonuses provided through the agency of weather and improved practices in North America, the high, rigid price supports in effect too long in the United States, and the rapid and almost complete involvement of the governments of almost all the major wheat importing countries in international wheat trading, have combined to set up a problem for which there is no simple solution. Unfortunately, the new wheat agreement cannot be a very powerful factor in the working out of this many-sided problem. V

Hog Marketing Canvass

THE Ontario Hog Producers' Co-operative, the selling agency created by the Ontario Hog Producers' Marketing Board, is now passing through a critical stage in its development. For this reason, it was decided to engage in an unprecedented canvass last month, of as many hog producers in the province as could be reached by 5,000 canvassers. Purpose of the canvass, as mentioned briefly elsewhere in this issue, was to acquaint every hog producer, if possible, with the purposes, plans and achievements to date of the hog marketing agency, and to line up as much solid support for the principle of marketing Ontario hogs through a single agency as could be secured.

Certain features of marketing board legislation are before the Supreme Court of Canada as this is written. It is not proper to discuss these features here. Nevertheless, if we assume that adequate and suitable legislation, both provincial and federal, will be made available, the marketing problem is by no means solved. This simple, but very important, fact is basically the reason for the canvass among hog producers in Ontario. Because an act has been passed and the producers of a specific farm commodity have approved the establishment of a marketing board in their behalf, does not necessarily mean that such a marketing board can operate successfully, or continue to do so. Unless a very substantial majority of the producers concerned really understand and approve of what is being done for them, a marketing board cannot usefully continue. If it cannot secure the co-operation from growers that is essential to its efficiency, it cannot render the service that growers expect of it. It is therefore encouraging, and in some measure exciting, to see a highly organized, large-scale educational effort engaged in by a farm marketing organization. V

A Unique Situation

AS pointed out in a recent issue, beef cattle producers on this continent are now faced with a unique situation. For the first time on record, cattle numbers in both Canada and the United States are at, or near, the peak of the normal cycle and show a combined total of just over 105 million head. The human population of the two countries shows a combined total of approximately 181 million. Beef consumption is at its peak, or close to it, in both countries. Most notably, there is neither scarcity, nor an appreciable surplus of beef coming to market. U.S. cattle prices, until fairly recently, averaged lower than Canadian prices, but taken by and large, beef production and consumption in the two countries are about as closely balanced as they have ever been.

This situation gives rise to legitimate speculation as to whether, in the face of continued rapid growth of population in the two countries, beef cattle producers should necessarily look forward to

the same rise and fall of beef cattle numbers that has been characteristic of this branch of agriculture in the past. If production and consumption are now reasonably in balance, and if the population of each country continues to grow in line with current forecasts, a corresponding increase in cattle numbers, allowing for some initial adjustment downward to create a price situation somewhat more favorable to the producer, should theoretically maintain a favorable balance.

Such a satisfactory condition obtaining for any length of time is perhaps too much to expect. It would have to exist over a very large area, divided into two countries, in each of which the industry is characterized by generalized and indiscriminate competition. Nevertheless, it does point up a serious and very vital problem, which constantly confronts agriculture in all its branches. Though undoubtedly a long way off, planned production for the industry, or even for any single branch of it, is an end that is clearly desirable. It might well be that one of the most important services to be rendered by marketing boards of the future, will take the form of suggestions and advice to producers as to the market outlook. Such effort would center on the problem of providing adequately for consumer requirements, while at the same time avoiding more than temporary surpluses. Indeed, the work of some of the existing boards points in this direction. V

Mr. Howe

IT is about time that a tribute was paid, on this page, to the Minister of Trade and Commerce, the Rt. Hon. C. D. Howe. The fact that it is overdue makes it all the more timely, now that another wheat agreement has been laid in the lap of the gods.

The fact is that it is doubtful whether another agreement would have materialized had C. D. Howe not stood so firmly behind his negotiators at Geneva and London. Many a skilful delegate has been stymied and frustrated by weakness at the seat of authority.

The Minister's greatest asset in Ottawa is that he is a businessman in government. That he is forthright—even blunt, at times—doesn't hurt him. He mimes no words, and wastes none. One wonders sometimes why he was ever attracted to the atmosphere of Federal politics; and suspects that it was at least partly curiosity about what could be done to salvage some of the wasted opportunities for good government.

In our thinking at least, he has been optimistic in Ottawa for years; and whatever combination of men and circumstances may have led to Canada's rapid industrial post-war development, there are many people, who—justifiably we think—give him the major share of individual credit.

At the present time he is both Minister of Trade and Commerce and Minister of Defence Production. No one else has had such a wide experience as a minister in Ottawa. During the war he was Minister of Munitions and Supply, and after the war Minister of Post-war Reconstruction. He has also been Minister of Railways and Canals, and of Marine and Transport. He is the Minister in charge of atomic energy, wheat marketing and Trans-Canada Airlines. He seems to be able to take them all in his stride and like it.

Our feeling is that too few wheat producers really appreciate the strength behind them in Ottawa, in the Minister who is responsible for the operations of the Canadian Wheat Board. A strong, experienced Minister in such circumstances can be a tower of strength. Mr. Howe had a broad working knowledge of the grain business when he entered politics and the Cabinet, at the time the Wheat Board was reorganized after the 1935 election. He has been through, if not in the midst of, every crisis in wheat marketing since that time. No one yet has been able to justly accuse the Minister of ever having done anything in connection with wheat marketing, which he did not believe was, or would prove to be, in the best interests of the wheat producers,—and that, we submit, is all that could be expected from any man. V

Honey Bees Have Secret of Long Life

by R. MIDDLETON

A TEAM of French doctors and chemists are at present undertaking intensive experiments on a substance that looks something like condensed milk and tastes rather like rhubarb. It might become the basis of a new drug that may lead to longer lives for human beings. The results of their experiments are being very carefully guarded, but an authoritative announcement is promised in the near future.

Scientists began their studies as the result of observations on what is perhaps the most mysterious and intriguing problem in the life cycle and history of honey bees — the amazing changes that take place in the body of the one bee larva that is selected by the nurse bees to be a future queen. The larva selected is exactly the same as its fellows; yet, in just over two weeks, it is twice the size and weight of the drones and workers. This metamorphosis is achieved by feeding the chosen larva on what is known as "royal jelly." It is this substance that is being so intensively studied.

There is no doubt about the fact that it is the royal jelly that causes the rapid and vast growth of the future queen. It is quite unlike the ordinary honey fed to the unselected larvae, and is secreted by special glands located in the heads of the worker bees, acting as nurses to the future queen. The main line of research being pursued by the French scientists—and also by chemists in other countries—is in the direction of trying to analyze this royal jelly in an attempt to discover what chemical, or chemical combinations, make the queen bee such a vastly superior specimen of the species. Not only is she twice the size and weight of the drones and workers, but she grows faster and *lives about 16 times longer than they do.*

Scientists hope that their studies of the "royal jelly," which causes these amazing changes, might isolate a substance that may be developed into a "wonder drug" to lengthen the lives of human beings.

The first studies of royal jelly were made as far back as 1894 by Leonard Bordas, one of the greatest authorities on bees, and who is still pursuing his studies in France today, at the age of 92.

However, the latest research has been instigated only as the result of popular interest being aroused two years ago by a nutrition expert in Paris. He wrote a book putting forward the theory that if royal jelly could prolong the life-span of a bee, there was the possibility that it could have similar effects on human beings.

As a direct result of this book, commercial interests almost immediately began putting royal jelly, and "royal jelly" preparations onto the market. These can be either eaten or drunk, and there is even one put out in the form of face cream!

Scientists, quite rightly, are very much against these completely premature preparations, which are of no good whatsoever. But in spite of this, demand for these goods is increasing

rapidly all the while. To meet these demands, beekeepers are doing their best to step up production of royal jelly in their hives. To do this, they remove the queen, then the workers quickly select several other larvae as future queens and start producing more royal jelly to feed them. As soon as this new jelly is produced, the beekeepers remove it and sell it at high prices. It's all very frustrating for the bees!

Scientists are sure that they are on the right track of a new wonder drug that might prove most beneficial to all of us. But research is by no means

complete, and they deprecate all premature uses by commercial interests. Until they make their full announcement, all that they are prepared to say at the moment is that an extract of royal jelly has certain healing properties when injected into human beings, and that there is the possibility that research may yield startling results when the experiments are completed.

Even if royal jelly cannot help human beings to increase their life-span, there is a certain chemical substance in the bodies of worker bees that has curative powers. This has

been proved by a series of amazing cures that have been achieved by Mrs. Julia Owen, of Kensington, London, who has cured cases of "incurable" arthritis with bee stings.

Her most remarkable case to date has been to cure a 52-year-old man by the name of William Eyre of "hopeless" blindness. She diagnosed his blindness as being due to a form of arthritis.

It seems, in the final analysis, that there are more things in a bee hive than meets the eye, and we can look forward to hearing about not only one, but even two new "wonder drugs." V



Illustrated is "Square-Tex" Pattern No. 946.

It's NEW!
SQUARE-TEX
makes floors
glow with beauty

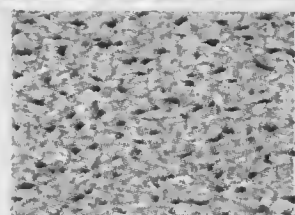
for only a few dollars a room



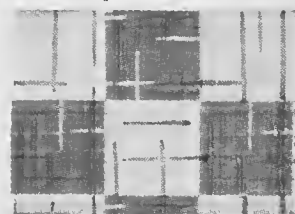
Congoleum Canada Limited, 3700 St. Patrick St., Montreal, Quebec

Gold Seal Congoleum does it again... produces another brilliantly designed pattern to make kitchen, bathroom or playroom floors come alive with new beauty! This smart, new decorator pattern can be yours for only a few dollars... and it's an extra special "buy" because it's Gold Seal. Only Gold Seal brings you the exclusive Congoleum *Wear Layer equal to 8 coats of the finest baked enamel.* The famous Gold Seal guarantees you satisfaction. See "Square-Tex" and all the smart Gold Seal patterns at your floor covering dealer's soon... See "Jackstraw" the pattern that makes rooms look bigger and "Sequin" the brilliant design for new "dressed-up" floors.

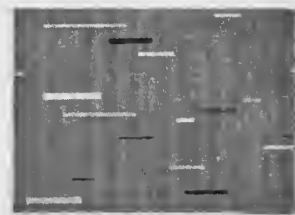
Ask to see Gold Seal Congowall too—it looks, feels and cleans like ceramic tile but costs only a few cents a foot. Congowall comes in a wide array of lovely colours, complete with contrasting strip at top. Ideal for bathrooms, kitchens and playrooms.



"Sequin" No. 939



"Square-Tex" No. 947



"Jackstraw" No. 811



5-PLOW MODEL GB

Disc-plow up to 10 feet at a cut!

You take a mighty cut at plowing costs when you hitch the powerful Model GB tractor to this WD Wheatland disc plow! And, with a Moline-Monitor seeding attachment you can sow in the same operation. Up to 61 drawbar HP (on gasoline) lets you walk away with big-capacity machines like this. You choose gasoline, diesel, LP-gas or tractor-fuel engines. Tougher, heavier, huskier . . . through and through . . . this giant of tractors is built to out-work and out-last them all. See it . . . drive it—at your MM Dealer's now!



You're twice the man with power like this!

Make lowest-cost seedbeds this MM way!

This all-new hookup of the MM UTS Special and the FO Flexible Tillage puts seedbed jobs on a brand new time-table! Mount a Moline-Monitor seeding attachment and you plow, sow and cover in the same operation. Gasoline, diesel, LP-gas and tractor-fuel engines give you a work-hungry reserve of money-making 4-plow power. New, built-in power steering and MM's exclusive Uni-Matic hydraulic system for machine control make the new UTS Special the easiest handling tractor in its size. If you're looking for a 4-plow power boost, ask your MM Dealer to give you all the facts on the powerful UTS Special!



4-PLOW UTS SPECIAL

NOBODY OUT-FARMS YOU . . . WHEN YOU ADD MM POWER AND MM MACHINES!



One Uni-Carrier — many machines!

This multi-purpose MM Uni-Tiller mounts tools for weeding, cultivating, soil preparation, sub-soiling and planting. All tools are quickly interchangeable . . . adding or removing tools lets you match draft to tractor power in any soil.



Plow 5-high-speed furrows a trip!

Plowing's no battle-neck when you team the GB tractor to a 5-battam MM Hi-Klearance plow. New 4-part sectional bottoms eliminate share sharpening . . . ore shaped for high speed.



Drill with Moline-Monitor accuracy!

Flax to soybeans, you drill them all with pin-point accuracy when you own a Moline-Monitor Grain Drill. You select either Fluted or Double-Run feeds, single or double-disc openers.

MINNEAPOLIS-MOLINE OF CANADA LIMITED

REGINA, SASKATCHEWAN

BRANCHES IN: WINNIPEG; CALGARY, EDMONTON; SASKATOON

Eastern Ontario Distributor

WATERLOO MANUFACTURING COMPANY, Waterloo, Ont.

Transfer Points in
Other Leading Farm Machinery Distribution Centres